

PLUS CD-ROM buZZ.Lite (full), 600 brushes, video tutorials and much more!

Adobe Photoshop

Natural media



FocusGuide
From the makers of **Computer Arts**

Craft dazzling images with
authentic art tools and
real-world textures



**132 pages of easy-to-follow tutorials and expert advice
to help develop your Adobe Photoshop skills**

Deceiving the eye...

The most breathtaking thing about traditional artwork is its price, so why don't you create your own great natural-looking pictures?

Suppose you've invited some guests over to dinner, and they admire the watercolour that's hanging above your fireplace. Imagine their gasps of amazement and the glow of satisfaction you'd feel when you modestly mention it's something you produced yourself. Or, think how much new grandparents would treasure an oil painting of their first grandchild...

Successful emulation of natural media – even if you're adept with Photoshop – can seem like a foreboding undertaking if starting from scratch. What tools are appropriate to use? How do you select a suitable image to work on, and choose a style and technique which best suits that image? The answers are all here in this Focus Guide. By following our tutorials covering wet media such as paint and pens, through dry media like pastels and pencils, to how to mix these media successfully, readers of all skill levels will soon have some impressive natural-looking images on their hard drives, ready to print and frame. More importantly, you'll have been inspired to produce some unique artwork of your own.

This issue's CD has everything your natural media project could need: buZZ.Lite (full app), three exclusive video tutorials, hundreds of brushes, a trial version of Photoshop CS... Enthuse your muse!





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Finding your way

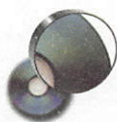
Our handy icons hold the key to a wealth of additional information. Here's what they all mean...

With so much to tell you about how you can create perfect portraits with Photoshop, it's hard to find room for all the information we want to pack in. That's why you'll find the special icons that occupy the margins on each page so useful.

As you leaf through the pages, you'll find a range of eye-catching symbols, each of which indicates an extra nugget of knowledge. The icons enable you to identify exactly what kind of information you're dealing with – for a guide to icon

categories, see below. These handy hints and tips are always relevant to the topic that's being discussed, and will help you develop your Photoshop skills that little bit faster.

Our writers are always experienced Photoshop experts who regularly contribute to our sister magazines, such as *Computer Arts*, *Computer Arts Projects*, *3D World* and *Digital Camera Magazine*. So you can rest assured that all the information they provide is both authoritative and thoroughly tried and tested.



On your CD-ROM

Tutorial files, trial software and more besides is included on your CD-ROM. Every now and then, we remind you of this by flagging-up the disc icon and listing the relevant disc contents.



Take note

You'll find a number of these nuggets of knowledge scattered throughout the Guide. They're crammed with useful information that complements the main text perfectly.



Top tips

This indicates an expert tip. Anything sheltered beneath this icon is guaranteed to reveal a useful tip, or advice about Photoshop's range of tools, options and features.



Watch out!

The 'skull and crossbones' sign means proceed with caution. You'll find some important points outlined below this icon, which you should certainly take seriously.



Further information

We'd like to tell you absolutely everything, but there's just not enough space. Instead, we refer you to other useful resources – such as websites and specialist books – for further reading.



Links

When we refer to a website, we may pull out the web address in the sidebar to make it easier for you to read and remember.



Shortcuts

Carrying out common tasks again and again can get a little tedious. Our handy shortcuts show you how to perform these tasks with a few deft key-presses, saving you lots of time and effort.

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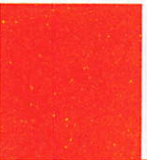


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Chapter 1

THE BASICS OF WORKING WITH NATURAL MEDIA

In this chapter...

- ☐ See how the canvas influences artwork
- ☐ Learn about different types of natural media
- ☐ Discover how to edit brushes to get the most realistic effects
- ☐ Apply natural media effects with filters
- ☐ Create realistic textures for different types of media

You'll need to have a good understanding of the different natural media, and how they're applied, before you can recreate their look convincingly on your Photoshop canvas

Photoshop is one of the most versatile creative software applications around, with a user base that has expanded well beyond its original photographic market into virtually every digital creative field. Graphic designers were among the earliest converts to the title, quickly followed by print and web designers taking advantage of the software's strong colour processing and image-optimisation capabilities. More recently, video and DVD producers have joined the party, attracted by Photoshop CS's support of dedicated features for such users.

However, the software isn't limited to these uses. One of the reasons

why Photoshop has become a keystone application within such a broad range of creative industries is its almost unlimited versatility (and what limitations there are tend to be those of the user, rather than the software itself). While Photoshop may not be a dedicated tool for emulating traditional artists' materials, it has more than enough functionality to recreate such effects with just a little lateral thinking.

Back to basics

Before you jump in and start applying natural media effects to your work, it's important to gain a basic understanding of different

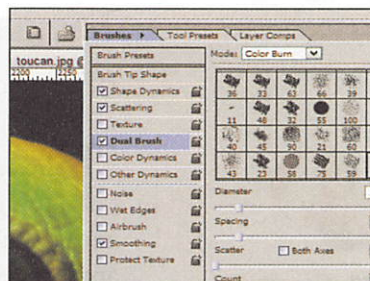
The canvas



Page 12 See how the canvas influences the texture of a traditional work of art



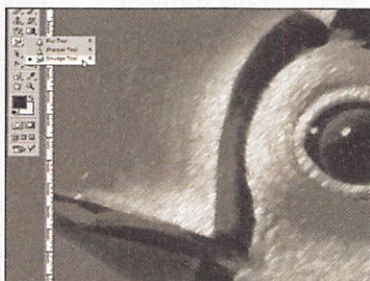
Page 13 Understand the characteristics of various different paint media



Page 14 The Brushes palette enables you to configure almost any type of brush



Page 16 Convert photos into natural media artworks instantly using filters



Page 18 Use various Photoshop tools to fine-tune your conversions



Page 20 Explore some creative toys that will make your work more realistic

natural media techniques and materials; this information will enable you to create the most believable effects in Photoshop. Such knowledge is particularly important if you want to fine-tune your artwork to make it appear truly like a work of art, rather than just a filtered conversion of a photograph.

For example, unless you've trained as an artist, it's unlikely that you'll know what type of canvas you would use for a particular medium, or what kind of brush would be typically used to apply different paints. Photoshop may provide lots of clever features for converting your images, and giving them the

appearance of being created by dry media such as pastels or crayons, but if you don't understand how these media interact, then your end results will look unnatural to anyone with a trained eye.

Realistic results

In this first chapter, we'll introduce you to these fundamentals, before examining them in more detail throughout this Focus Guide. Having gained an understanding of the basics, you'll be in a much better position to produce credible results as we take a more practical look at how Photoshop can be used to recreate the look of natural media.

The canvas

The canvas is the foundation of a work of art, and has a big influence on the final product

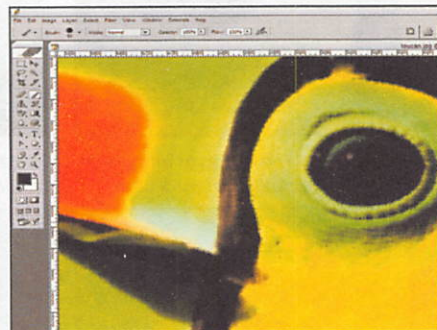


What is a canvas?

A traditional artist will normally use the term in relation to materials, such as those listed in the boxout on this page, although we'll use the term to refer to any material on which artwork can be created.

The canvas provides the basis for any physical work of art, and will ultimately affect the appearance of the media that's applied to it. In the next chapter we'll look in detail at the different canvas types listed below, learning, for example how a material canvas will behave compared with a hard board canvas when using oils, acrylics or pastels.

Certain media work better on some types of canvas than on others. For example, while watercolours can be painted on to any kind of canvas,



Applying the Water Paper filter provides a good example of how the texture of the canvas can influence the final image

it's only when applied to watercolour paper that the special characteristics of the media become apparent.



Applying the texture

Understanding how different canvas textures affect an image will help you to apply texture effects to your images. In Chapter 2 we'll be looking at methods of overlaying textures, using Photoshop's blending modes to achieve a realistic finish.

CANVAS TYPES

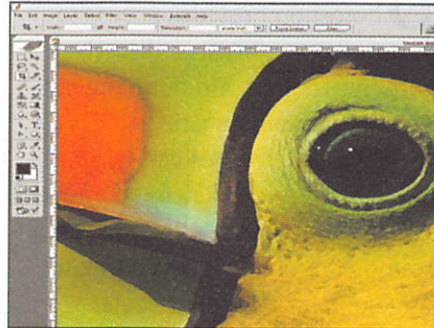
- ☐ **A MATERIAL** canvas is typically made of a cotton-based fabric stretched around a wooden frame. The fabric of the material is primed to make it waterproof, although the texture isn't affected. A material canvas is most commonly used for oil or acrylic paints.
- ☐ **BOARD CANVASES** have a smoother texture than the material variants, and come in various finishes, depending on the media to be used. Pastels and other dry media will commonly be applied to such canvases.
- ☐ **WATERCOLOUR PAPER** has a finish sympathetic to the media, which allows the paint to absorb into the paper to create the effects that are synonymous with the technique.
- ☐ **CANVASES CAN** be made from almost any material, from plain old paper and card all the way through to untreated wood. Many artists will experiment with canvases to create interesting and unique results.

Types of media

While the canvas provides the foundations of an artwork, the medium is the building material

The canvas certainly has an influence on a finished work of art, but the overall look of that art is determined by the media used, and understanding how different media behave is all important. A physical artist will have virtually any medium available to them, from traditional materials through to experimental media that could include almost anything, so long as the hue and texture are suitable for the task.

In Chapter 2 we'll look in more detail at some established methods, including paints, inks and dry media,



Each type of media has its own distinctive behaviour, which will be further influenced by the type of canvas to which it's applied

and explain how they behave, as well as looking at examples of artists associated with particular media.



The meaning of media

From the Latin plural of 'medium'; not to be confused with the word used to refer to industries such as newspapers and broadcasting, the term media in the art world refers to the materials, such as paints and inks.

MEDIA TYPES

- ❑ **PAINT IS** the most common art media, and oils, watercolours and acrylics are the most popular types. They're generally applied with a brush or palette knife.
- ❑ **INKS** can be used to create a variety of effects, depending on the tool or implement with which they're applied.
- ❑ **DRY MEDIA** come in a variety of forms, from pastels and crayons through to chalks and charcoals. With such a variety of textures and finishes the appearance of the artworks produced can vary greatly; creating a realistic finish based on dry media may require some practice, in addition to a sound understanding of how the materials are applied.
- ❑ **MIXED MEDIA** provide more experimental opportunities for the artist; different media types are combined to achieve unusual – and sometimes unexpected – results.



Mixing media

Mixed media effects are the most complex to recreate digitally, as different types of media will interact with each other in unique and often unpredictable ways. For this reason it's advisable to steer away from such methods, and master individual media first.

Brushes

As paint is the most common art media, the brush is the most commonly used tool



Tablet and pen

Painting with the mouse is an unnatural action, as you're effectively trying to apply paint with your fist, and the subtlety afforded by using the fingers is lost. By far the more natural method of applying digital paint is by using a graphics tablet and pen. As well as feeling more intuitive, this method has an added advantage in that pressure sensitivity options can be enabled for added realism.

Photoshop provides access to numerous brushes directly from the Toolbar, although other types of implement can also be emulated. Brushes can be configured to reproduce the effects of a palette knife or airbrush, for example, to create an even greater range of natural media effects.

With a brush selected a number of options become available to you through the contextual options bar at the top of the Photoshop screen. Here you can alter the size and behaviour of your chosen brush,

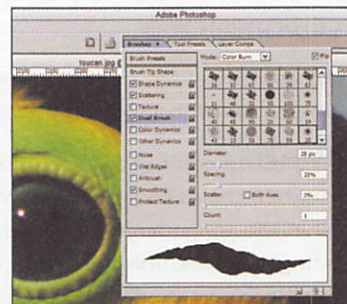
although it's a good idea to become familiar with keyboard shortcuts; the '[' and ']' keys are particularly useful for quickly increasing or decreasing the brush size on-the-fly.

To fully understand how best to employ different brush strokes and textures you need to refer to examples of traditional art to see how the paint is applied, whether by brush, palette knife or airbrush; only then should you start to edit specific dynamics in the Brushes palette to achieve the most realistic results.

THE BRUSHES PALETTE

You can configure a brush for almost any kind of painting job

Photoshop's default brushes are fine for most routine tasks you'll perform, but if you want to get creative then you'll need to alter their settings. With the Brush Tool selected, access the palette via the palette well (or through the Window menu); you'll see that you have a great deal of control over the shape, scattering and general dynamic behaviour of the brush. Once you've created a custom brush, you can easily save it for future use, courtesy of the shortcut icon at the foot of the palette. Alternatively, you'll find plenty of brushes freely available for download on the internet – check out the address below as a start.



The Brushes palette can be found docked in the palette well by default in Photoshop 7 and CS

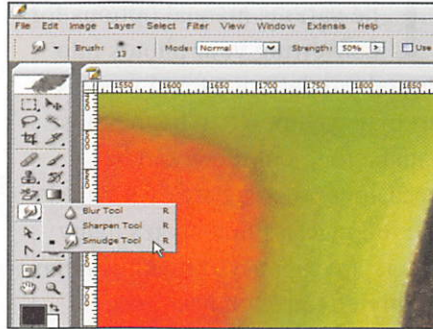
http://graphicssoft.about.com/library/free/blfree_psbr.htm

Merging media

Newly applied paint will interact with paint that's already on the canvas in a certain way

Layers are an extremely useful feature of Photoshop, but they pose a problem when it comes to recreating the effects of natural media. A painter working on a canvas wouldn't have the advantage of such a feature, and would have to rely on careful planning during the preparation of the work, and make much use of blending paints.

Creating realistic blended effects can be difficult when we're working with layers, but you can easily make use of Photoshop's Liquify filter, along with the smudge, blur and



With a little imagination you can make use of tools intended for the digital darkroom to blend areas of an image together

fade options, to help recreate such effects. We'll be looking at this subject in more detail in Chapter 5.



Protecting layers

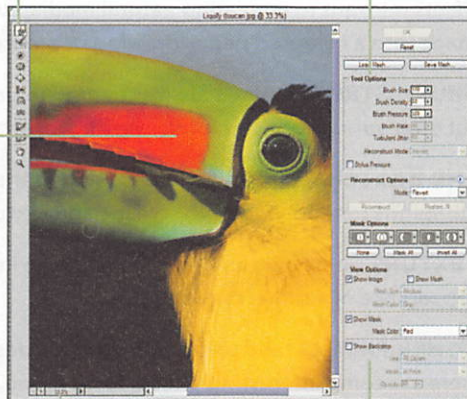
Although blending layered content can produce some original and realistic results, any layers that are blended may lose their independence. It's therefore a good idea to make back-ups of either your entire image or just the affected layers, which you can revert to if things don't quite go to plan.

LIQUIFYING IMAGES

The toolbar includes numerous tools, from the regular Warp and Twirl tools to the more specialised Push and Bloat options.

Any changes applied will be previewed here. Should you need to return the filter settings to their defaults hold down the [Alt] key; the Cancel button will change to a Reset button.

As the preview area may be too small to display the required level of detail there are zoom and magnification controls available at the foot of the interface.



The configuration area enables you to adapt the brush size and dynamics to achieve the most realistic results possible.

The Liquify filter makes use of a three-dimensional mesh to calculate changes. The View Options enable you to see this if required.

By ticking Show Backdrop you can decide which layers will be available within the preview, to help you fine-tune more complex images.

Filters

Photoshop's filters are an indispensable tool for emulating natural media techniques



More filters

Although Photoshop provides a generous selection of filters to get you started, you may want to expand your arsenal. A quick search online will reveal plenty of dedicated third-party plug-ins that you can download if you're stuck for inspiration.

The various manual options for converting your photos into digital emulations of real works of art may well prove to be the most satisfactory, but there will be occasions when a quick fix will do the job nicely. Photoshop's many filters are capable of making some highly effective conversions, although they should only be applied once you have a reasonable idea of what might be possible with actual media, otherwise your image could look unnatural. The filters are listed under the Filter menu, although the



The Filter Gallery available in Photoshop CS helps you locate and preview multiple filters before they're applied to an image

new Filter Gallery feature within Photoshop CS will simplify the task of finding the right effect.



Merging filters

Some effects can be created by applying a single filter, while others will require you to combine filters. Photoshop CS includes a Filter Gallery, which enables you to preview various filter combinations, but if you're using an earlier version you'll need to apply filters individually, and in the right order, to get the best results.

FILTER FAMILIES

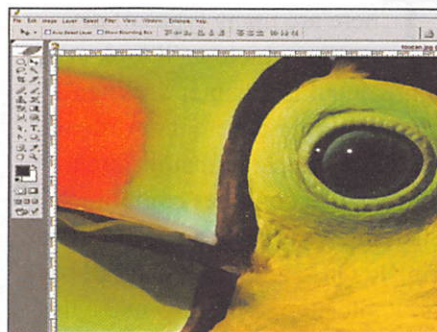
- ☐ **ARTISTIC** filters are contained within a submenu that offers many effects relevant to emulating natural media, such as converting your image into a coloured pencil drawing or a watercolour.
- ☐ **BRUSH STROKES** filters are less geared to producing a particular look, but offer various options for converting an image stylistically.
- ☐ **THE SKETCH** options provide a hybrid of the artistic and brush submenus for applying both stylistic and textured effects.
- ☐ **TEXTURE** filters give an overall finish to an image that emulates the appearance of various canvas types.
- ☐ **OTHER FILTERS** tend to be more graphic design-related, although there are some interesting effects to be found, such as the Mosaic and Crystallize options.

Painting techniques

Oils, acrylics and watercolours have their own particular behaviours, and shouldn't be mixed

When you're converting an image to emulate natural media, decide on the look that you're after and stick to it. If you've decided that an image will look best as a watercolour, for example, don't try to introduce effects that you wouldn't find in a traditional watercolour.

Oils, acrylics and watercolours each have their own particular characteristics, and only the most experimental artist would try mixing them. This makes sense when you think about how oil and water react to each other, and although it might



The Dry Brush filter is exceptional, as it can be configured to emulate either an oil-based or watercolour finish

be possible to emulate such a finish digitally, it would be highly unusual to find it in a physical work of art.



Reset, don't cancel

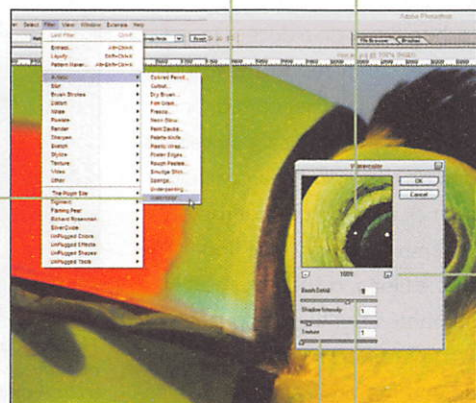
If things don't quite go to plan with your filter settings, don't worry about cancelling the action to start again. Instead, hold down the [Alt] key and you'll find that the Cancel button, normally found under the OK button, converts into a Reset button, enabling you to return the settings to their default configuration and start again.

CONVERTING TO A WATERCOLOUR

The main image will remain unaffected while you experiment with the settings that are made available in the filter options.

Photoshop's Watercolor filter can be found under the Artistic submenu, under the main Filter menu.

The Texture slider gives you control over this all-important aspect of the watercolour medium.



In versions prior to Photoshop CS you'll find the filter controls include a preview area, which gives an indication of how your conversion will appear.

Photoshop CS affords you the luxury of scaling the preview window, but in earlier versions you'll need to make use of the magnification buttons below the preview pane.

The Brush Detail and Shadow Intensity controls will help to determine the look of the conversion.

Dry media

Whether it's charcoal or chalk, a little manual editing will add realism to your conversions



Finger painting

If you choose to make use of the Smudge Tool to blend in a dry media finish, you'll find the results are far more realistic if you set the brush size accordingly, and check the Finger Painting option available in the tool's contextual options bar.

There are many types of dry media, which we'll look at in more detail in Chapter 8. When you're mixing different dry media, take care to ensure that different styles and techniques compliment each other to create an appropriate finish. Once again, we can fall back on Photoshop's filters to make the basic conversion, before modifying the image manually.

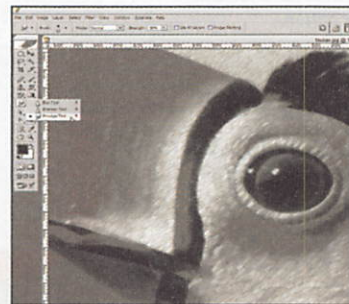
The most common type of dry media fall into the pastels and crayons category; these tend to be applied by hand, and this can

influence the way in which filters that are designed to emulate these effects are applied. To this end, you might want to consider extending the basic options that are available to you through the filters by employing some of the techniques we'll cover in Chapter 5, putting regular Photoshop tools such as the Liquify filter and the Sponge and Smudge tools to imaginative use. In this way we can move away from the clinical appearance that filters can often create, and produce a more natural-looking hand-drawn finish.

SMUDGING DRY MEDIA

Rub paints into each other without getting your fingers dirty...

Although the regular Photoshop filters do a decent job of converting an image to emulate natural media, the results can look a little too polished and digitally generated. One way around this is to consider how the physical equivalents of such media might be handled. Chalk and charcoal might be applied directly from the stick, for example, but they'll subsequently be softened or smudged using the finger. The Smudge Tool, grouped with the Blur and Sharpen tools, is normally used when editing photos, but there's no reason why you can't use the tool to fine-tune filtered conversions. Modify the brush size to suit; you'll be amazed at the results.

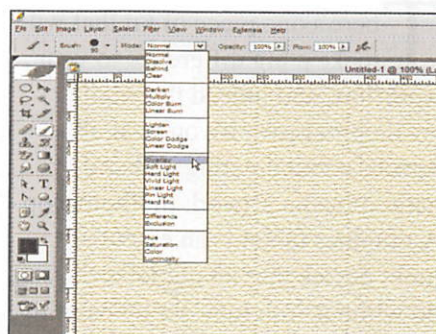


The Smudge Tool offers an ideal way of adding some finishing touches to a chalk and charcoal-style image

Realistic media textures

Getting the texture of the media right can add that crucial touch of realism to an image

We've already looked at how the texture of a canvas can influence a painting, and we'll be delving into this in more detail in the following chapter. However, we also need to consider the texture of the media itself. Many of the filters we'll look at will impose a realistic texture on an image, depending on the type of media you're trying to emulate, but there will be occasions when you need to generate textures other than the basic material or board canvas types. These can be created manually, or you might



A scanned original texture can be used to apply that texture to an image, with the help of Photoshop's blending modes

choose to apply existing textures with the aid of blending modes, or by using the Texturizer filter.



Blending modes

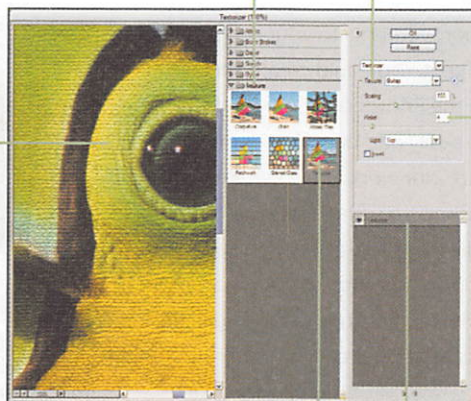
A tool blending mode controls how a tool or layer affects pixels in an image. Employing blending modes enables you to make subtle changes to an image, such as overlaying a canvas texture on to it.

THE TEXTURIZER FILTER

The filters are organised in a series of expandable categories. The Texturizer is logically located under the Texture option.

In Photoshop CS the Texturizer filter is made available through the Filter Gallery, which contains a large preview area of the revised image.

Thumbnail images indicating the effect of the individual filters appear when an option is expanded.



A number of different textures are made available through the drop-down menu, including brick, burlap, canvas and sandstone.

Configuration options change depending on the selected texture, and enable you to alter the appearance of the texture to suit a particular image.

The Filter Gallery enables you to preview multiple filters. You can create additional filter entries using the shortcut icons at the bottom of this area.

Extending Photoshop

Photoshop can handle just about anything you want to do – but what about your hardware?



Wacom

There are numerous manufacturers of graphic tablets that are compatible with Photoshop, but by far the most established is the American company Wacom. You don't have to buy a large tablet; a small A6 one is more affordable, and will make a huge difference to the way you work. You can get more information at www.wacom.co.uk.

There's one piece of kit that will make a big difference to your workflow, and indeed the whole create processes, if you're at all serious about creating realistic natural media artwork in Photoshop. A graphics tablet is an essential input device that no digital artist can do without. You may get by painting with the mouse, but only by using a pen can you accurately reproduce a hand-painted look.

Not only will you benefit from a more natural and ergonomic method of working, you'll also be able to

change the way that a tool behaves by varying the pen pressure. This feature adds another level of realism to your work, with the thickness of a stroke, for example, changing depending on how hard you press.

Naturally Photoshop has full support for graphics tablets, and many new features will become accessible if you use one. Imagine being able to determine the angle at which an airbrush is applied, and the amount of paint emanating from it, and you'll begin to see how much potential a graphic tablet offers.

SOFTWARE EXTENSIONS

Got a little more cash to invest in your favourite image editor?

You can make dramatic improvements to your converted artwork by adding a frame to it. You could create such a feature by hand, but using the PhotoFrame plug-in from Extensis will enable you to easily add one of a seemingly infinite variety of borders to your work. The software works directly from within Photoshop, so using it won't interrupt your workflow, and by adding a realistic border around your work you'll be applying a finishing touch to your work that will help to convince the viewer that they're looking at an original work of art – or at least a print of one – rather than a digitised conversion.



You can add a realistic frame to your artwork using the PhotoFrame plug-in from Extensis

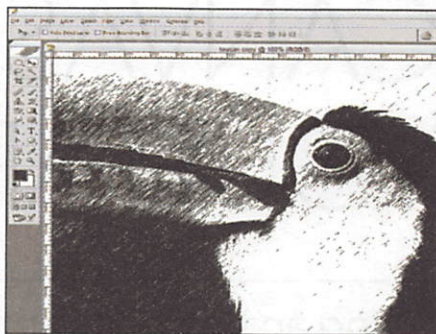
www.extensis.co.uk

Art in perspective

A better understanding of the creative process will help us to achieve realistic results

Hopefully, we'll have provided some food for thought in this opening chapter, so that you pause to consider a few things before diving straight in and applying filters left, right and centre. Photoshop filters can do an excellent job of converting your images into any number of natural media styles, but only when you consider the context in which such artwork would be created can authentic results be achieved.

We'll look at specific elements in later chapters to give you a more practical knowledge of the creative



The Graphic Pen filter used here strips the rich colour of our original image; a watercolour effect would have been much more effective

process, but by considering the following basic elements you'll find that your work benefits enormously.



Work on a duplicate

Before you begin experimenting with filters, and start to make irreversible changes to an image, make sure that you duplicate your image, and work on the copy. That way, you'll always have a copy of the original image in case things don't go to plan.

KEY CONSIDERATIONS

- ☐ **CHOOSE AN IMAGE** and media style that compliment each other. An image rich in colour won't be effective in a monotone media such as charcoal or ink; a watercolour effect would be more appropriate.
- ☐ **DON'T MIX** media unnecessarily. It might be tempting to apply multiple filters to create unusual and experimental finishes, but this will give away the fact that the artwork is a digital conversion.
- ☐ **ADD DEPTH** through textures. A physical work of art will have certain textural characteristics, whether these are in the canvas, the paint or a combination of the two.
- ☐ **STUDY THE MASTERS.** Too much reliance on filters will result in a digitised approximation of a particular medium. A little background research into how particular media are applied will enable you to make subtle modifications by hand that will make all the difference.



Zoom to view

Many of the effects that you'll apply to your images will be quite subtle. When previewing any changes, be sure to view your work at 100% magnification, otherwise you might miss such details, or over-compensate with your filter settings.

Chapter 2

CREATING THE CANVAS FOR YOUR ARTWORK

In this chapter...

- ☐ Apply canvas textures to images using blending modes
- ☐ Learn when to use material and board canvas textures
- ☐ Understand the dynamics of different watercolour papers

Giving an image an authentic canvas texture will help to trick the viewer into believing that they're looking at an original work of art, rather than a digitised conversion

Canvases are made of various different materials, each with their own characteristics and textures, and, although many of Photoshop's natural media filters can go a long way towards creating a realistic finish consistent with a particular style, there may well be occasions when you need to emulate a canvas texture by hand; for example, when you're performing a conversion without using filters.

Blending textures

One method of applying a canvas texture to an image is through the use of blending modes, which we'll look at in some detail over the

following pages. A layer containing a canvas texture can be blended with the image layer to impose that texture on the image as a whole, creating the impression of a realistic work of art rather than a simple digital conversion.

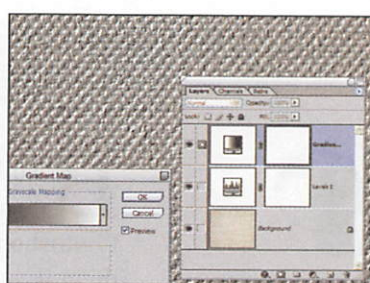
Getting the right canvas texture for a particular medium is another important consideration. For example, a watercolour would only be painted on dedicated watercolour paper, as the paper plays an important part in creating the distinctive look associated with that medium. Applying watercolours to a heavier burlap or material canvas would result in the finished image



Page 24 See how blending modes can add the texture of one image to another



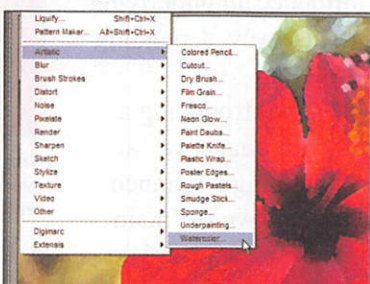
Page 26 You may need to reach for your camera to get realistic canvas material



Page 27 Convert textures captured with your camera into suitable images



Page 28 Learn about board canvases, and find out how to emulate them



Page 30 Watercolour paints require particular types of canvas paper



Page 31 Blend filter effects to get realistic watercolour canvas textures

looking unnatural to someone with a trained eye.

Don't worry if you're not overly familiar with which canvas is used with which medium. We'll look into this in more detail in this chapter, so that when it comes to choosing the right canvas for your particular natural media project you'll be in a position to choose the right version with confidence.

Scanned or digitised?

In Chapter 10 we'll be looking at how you can generate digitally rendered textures that go beyond the traditional canvas, using various tool and features that are available

in Photoshop, but in this chapter we'll be concentrating on applying a scanned texture to an image. Scanning a canvas provides a more convincing emulation, because pattern repeats won't be as evident as they might be if a filter such as Texturizer was used.

However, if you're planning to use your own scanned textures, remember that you may need to carry out some basic edits to the resulting image to retain a consistent appearance. This will help you to successfully impose the texture on to your image using blending modes, and imprint the texture evenly across the entire canvas.

Understanding blending modes

Influence one image with another to produce a realistic canvas texture for your artwork



Understanding the modes

There are many blending modes available, although not all will be suitable for applying canvas textures to images. We don't have space to explain them all here, but you can check out the Photoshop Help files for a more detailed explanation of the individual modes.

Blending modes are an often-misunderstood aspect of Photoshop, but the principle behind them is actually very simple. The feature allows us to use an image on one layer to influence an underlying layer in a particular way, depending on the mode selected.

When it comes to introducing a canvas texture to an image we can place a layer containing a scanned image of a texture above the main image, then choose an appropriate blending mode from the drop-down menu at the top of the Layers



Here a scanned canvas texture has been placed over an image, with the layer's blending mode set to Overlay to achieve the desired effect

palette. With a little experimentation, you'll soon discover how different modes will affect your work.



Blending the blend

Once you've applied a blending mode to an image, you may feel that the effect is too powerful. Don't forget that you can adjust the opacity of the blended layer, using the slider available at the head of the Layers palette, to reduce its impact.

BLENDING MODES FOR TEXTURES

- ☐ **OVERLAY** superimposes the upper image on the lower base layer, while preserving the highlights and shadows of the base colours.
- ☐ **SOFT LIGHT** darkens or lightens colours depending on the base colour, and produces a more subtle effect than Overlay mode.
- ☐ **HARD LIGHT** multiplies or screens the colours, depending on the base colour. This mode produces a more pronounced effect than Overlay mode, and is more suited to brighter images.
- ☐ **THE VIVID LIGHT** mode applies a colour dodge or burn blending mode, depending on the base colour. This produces an even harder effect than Hard Light mode, and produces some interesting painterly effects.
- ☐ **THE PIN LIGHT** mode tends to enhance the contrast of both the base and the blended layers, producing a varnished, aged appearance.

Applying blending modes

Applying a realistic texture to an image is child's play when you have the right tools



- 1 Open a photographic image that hasn't been modified in any way, so that we can fully appreciate how the blended canvas texture affects the final image. Next, open the burlap.tif file from the CD and drag its single layer from the Layers palette directly on to your image, to duplicate the texture while simultaneously creating a new layer.



Burlap.tif

Use the burlap.tif image from the cover CD to apply a material canvas texture to an image, using a variety of blending modes to see how they affect your image.



- 2 Close the burlap.tif file and return to the original image, which should now contain the photo layer plus the new layer containing the texture. Select this layer, and go to the drop-down menu at the top of the Layers palette, which should read Normal. Select the Overlay option, and notice the change in the texture of the image where its layer overlaps the canvas layer.



- 3 As a blending mode makes no actual changes to the layer content of either the blended or the base layer, you can safely make changes to the blending mode without affecting the layers. Select the texture layer once more, and this time experiment with a few alternative blending modes to get an idea of how they influence the base layer.



Spot the difference

When you're experimenting with different blending modes, it often helps to position the blended layer only partially over the base layer. This enables you to see exactly how the blending mode is affecting the image, while keeping part of the original image visible for easy comparison.



- 4 Of course, not all the modes will give good results, although some may produce interesting and unusual effects. Try the Hard Mix, Difference and Luminosity modes for example; you may come across a mode that inspires you to choose a particular medium for the subsequent conversion of your image.

The material canvas

Variations in both material and texture will influence the appearance of a conversion



Where to buy a canvas
Blank canvases aren't overly expensive; you can get a reasonably sized pre-primed canvas measuring around 20"x20" for less than £10. Check out some of the online retailers, such as www.jacksonsart.com.

One advantage of scanning in your own canvas textures is that you can take advantage of the wide variety of types that are available. If you rely solely on the Photoshop Texturizer plug-in (which we'll consider in detail in Chapter 10) then you'll be restricting yourself to a very limited selection.

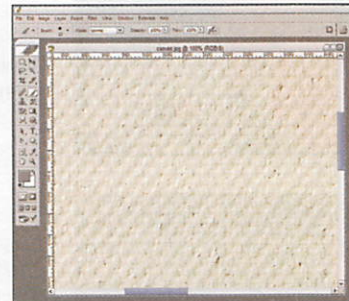
The material canvas is primarily made of a linen or cotton material that has been stretched over a wooden frame. A professional artist will have a choice of different grain textures, all of which offer different

characteristics for painting on. Before it can be used, a material canvas must be primed with what is effectively a paint undercoat, which seals the fabric of the material in preparation for the application of the paint. The medium that will generally be applied to such a canvas will be oil or acrylic paint, which introduces additional texture to the artwork. Oil paintings are often sealed with varnish to protect the finished work, which further contributes to the overall look and texture of the painting.

CAPTURING A CANVAS

The easiest way to digitise a canvas is with your digital camera

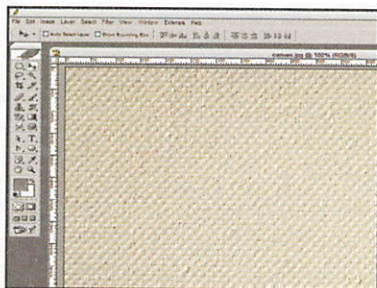
As you'll want to capture as large an area of your canvas as possible, a regular desktop scanner will be unsuitable, so you'll need to turn instead to your digital camera. For the best results, you'll need a camera with a reasonable pixel-count; anything above 4 megapixels should be sufficient, although the higher the resolution, the better the quality. You'll also need to ensure that the canvas is evenly lit from a number of sources that don't reflect into the lens. The camera should be mounted on a tripod and positioned perpendicular to the canvas, with sufficient distance between the lens and the subject to avoid barrel distortion or vignetting.



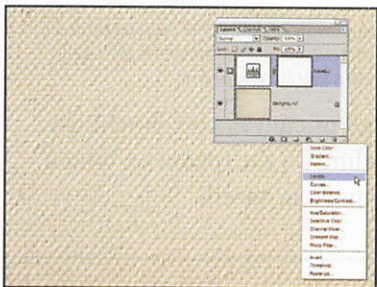
A real canvas will contain more irregularities in texture, colour and finish than a filter-generated one

Cleaning up your canvas

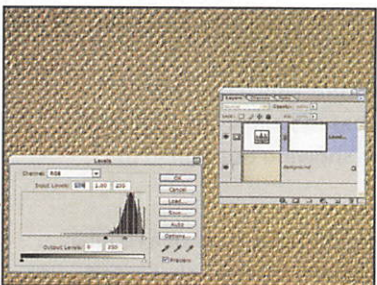
Once you've captured your blank canvas, you'll need to do some digital priming



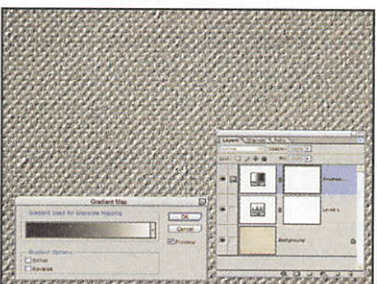
- 1 Open the canvas.jpg image from the CD for a shot of a typical canvas texture that you might choose to apply to an image. At first sight the image remains recognisable as a canvas texture, but to get the most from it when working with blending modes it will benefit from a little adjustment first.



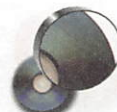
- 2 First we need to boost the contrast to enhance the natural texture, but, rather than use the Image > Adjustments menu, click on Create new fill or adjustment layer at the bottom of the Layers palette, and select the Levels option; this will call up the Levels dialog window. Any changes made will be applied to the adjustment layer, leaving the canvas image untouched.



- 3 The dialog box is dominated by the graph-like histogram, which in this case is positioned towards the right, indicating a bright image. At the foot of the histogram are three markers that indicate the levels at which the image's shadows, midtones and highlights are currently set. Drag the left-hand (shadows) slider to the left edge of the histogram and notice how the image's contrast is boosted.



- 4 Although we've boosted the contrast, we've made some obvious changes to the colour. Create a Gradient Map adjustment layer, choosing the black to white gradient to effectively make the image greyscale. By converting the dominant colour to grey, only the texture layer's highlights and shadows will influence the image layer to which the texture is applied.



Canvas.jpg

The canvas.jpg image from the CD provides a sample digital camera capture of a blank canvas that you can use to follow the steps on this page, as we prepare our canvas for use with blending modes.



Why grey?

The most effective blending modes for a canvas texture include Overlay and the various related light modes. Each of these will tend to enhance content on the blended layer that falls at the extreme of the black and white spectrum, so by making the dominant canvas colour grey we're ensuring that the colour is effectively ignored, with only the texture being used to influence the image.

Painting boards

The board is a sturdier platform on which to paint, and supports a wider range of media



Filters first

There's little benefit in taking photographs of real board canvases to overlay, as the effect on the final image is so subtle as to be almost unnoticeable, and many of the filters that emulate the media that would be used on a board take into account the look of the appropriate canvas.

The stretched material canvas is probably the most familiar platform on which artwork is created, but limitations are imposed by the elasticity of the material. Painting boards, on the other hand, are more sturdy bases, on to which virtually any kind of natural media can be applied.

Each board will have its own particular textured finish, which may or may not influence the final appearance of the work of art. We've listed some of the main types of art boards below, so that you can gauge



Close inspection of an acrylic canvas board reveals its texture, although this is primarily to provide a key for the paint

the kind of canvas you should use depending on the media on which your image is based.



A painter's perspective

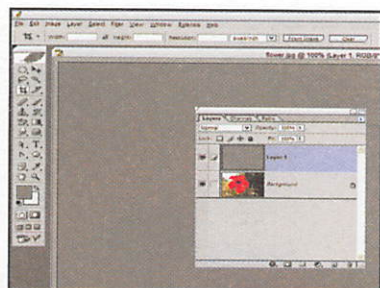
Windsor and Newton is an established company that has been providing materials for artists for many years. Its website, at www.windsornewton.com, also has a number of practical tutorials that will provide some valuable insights into working with different media.

DIFFERENT BOARDS

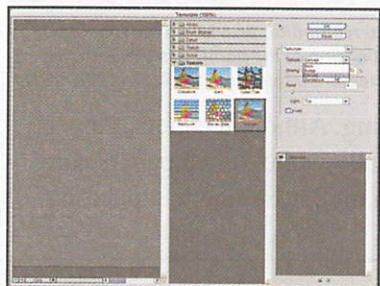
- **AN ACRYLIC BOARD** will have a subtle texture, which is primarily employed to provide a key for acrylic or oil-based paints. The thickness of the medium will prevent any texture from showing through in the finished painting.
- **PASTEL CARD** and board are generally smooth, with more of a regular paper or velvet finish that allows dry media such as pastels, chalks and charcoals to be applied effectively.
- **MOUNTING BOARDS** are designed to hold or frame a finished picture, although artists might also use this smoother finish when creating mixed media projects.
- **A WATERCOLOUR BOARD** supports a variety of papers, ranging in texture from smooth to rough, which give this medium its unique appearance; see page 30 for more information.

Emulating a canvas board

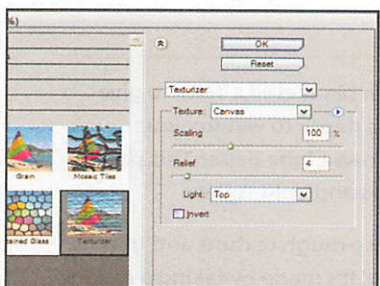
Photoshop filters provide all you need to recreate the subtle texture of a board



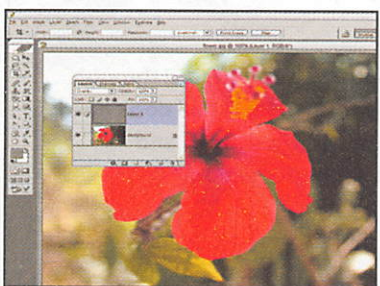
- 1 Open the flower.jpg file from the CD and create a new empty layer. Fill this new layer with a mid-tone grey, as we'll be applying an Overlay blending mode to the final texture. As we saw on page 27, a mid-tone grey will enable our final texture to be overlaid without unduly influencing the original colours of the image layer.



- 2 Select the filled grey layer and choose Filter > Texture > Texturizer to call up the Texturizer dialog. The screenshot here shows what it looks like in Photoshop CS; earlier versions of Photoshop will provide a similar interface outside of the Filter Gallery. Choose the Canvas option from the Texture drop-down list.



- 3 Adjust the available settings to suit the image. The scale of the texture will help to give some idea of the suggested size of the image, while the relief determines how smooth or rough the canvas will appear; we settled for 100% scaling, with a relief setting of 4. Play around with the lighting source to see how this makes a difference; we left this at the default Top option.



- 4 OK the settings to return to the main image, and you'll see how our filled layer has taken on the characteristics of our configured canvas. Keep this layer selected and choose the Overlay blending mode in the Layers palette, and you'll see how effective our canvas texture has become. If you prefer, reduce the opacity of this layer to around 50% to soften the texture.



Flower.jpg

The flower.jpg file on the CD will provide a suitable image to which we can apply a subtle board canvas texture. The balanced range of shadows, midtones and highlights will enable you to see how the conversion affects different tones.



Shades of grey

As we've used a mid-tone grey to minimise any colour changes our textured layer might impose, you could choose to take advantage of this by using a lighter grey to lighten the image, or a darker grey to add intensity to the colour.

Watercolour canvases

The type of paper used plays a big part in determining the look of a watercolour painting



Gouache

Gouache, also known as body colour, is a heavy, opaque, watercolour-based media that produces a less wet – yet stronger-looking – finish than ordinary watercolours.

Watercolours and the related gouache media have certain characteristics that are influenced by the texture, weight and colour of the paper. Rough papers offer good all-round performance, and take their appearance from the pressed mould by which the paper is formed. This method of manufacturing the paper results in a finish that provides both texture and stability. The weight, too, has some influence over the paper's texture; lightweight papers should be stretched if substantial amounts of water are to be used, to avoid



The Watercolor filter provides a reasonable approximation of the painting style, with the canvas texture influencing the look of the image

cockling. Although papers are generally white, tinted papers can give a mellower tone to a painting.



Cockling

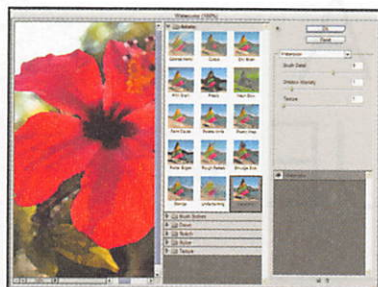
As watercolours are naturally water-based, there is some conflict between the medium and the canvas. As the canvas is primarily paper-based, too much water content can cause the canvas to crinkle and warp, an effect known as cockling.

PAPER SURFACES

- **ROUGH PAPER** has been pressed between blanket-like 'felts' to give it a rough, embossed finish. This finish lends depth to watercolour washes, as the pigment settles into the hollows of the paper. This paper is most popular for expressionist techniques and bold styles.
- **NOT PAPER** (cold-pressed paper), has a less-rough texture, and gets its unusual name because it is 'not hot-pressed'. It's made by taking a rough sheet and pressing it again without the felt, to produce a paper generally considered the easiest to use.
- **HOT-PRESSED PAPER** is made very smooth by being passed through hot metal rollers. It's popular with painters who like detail and don't need the granulation of heavier surface finishes, or with illustrators and designers who require texture-free artwork for reproduction.

Watercolours with texture

The Watercolor filter may produce an effective conversion, but it does little for the texture

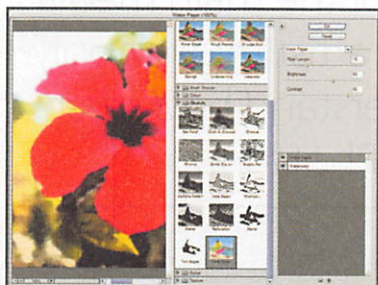


1 Open an image you want to convert, or make use of the original flower.jpg file. Choose the Filter > Artistic > Watercolor option to call up the dialog window. You'll notice that the preview shows a reasonable watercolour conversion, but does little about creating a texture that might suggest the kind of canvas used.



Flower.jpg

You can choose to use your own image for this walkthrough, or make use of the flower.jpg file we used earlier. If you do use this image, be sure to revert back to the original file.



2 Don't worry too much about this at the moment, but do increase the Brush Detail to around 12, to ensure that visible edges retain a little more detail. If you're using Photoshop CS, click on New effect layer and choose the Water Paper filter from under the Sketch options; you'll see how the two filters combine to produce a more realistic watercolour canvas effect.



3 You can achieve a similar effect in earlier versions of Photoshop by applying the two effects individually, as there's no Filter Gallery feature. This may involve a little trial and error, but equivalent results should be possible.



Additional textures

The Texturizer filter provides a small selection of frequently used textures, but you can easily add more, using regular Photoshop files as a bump map to simulate bumps or wrinkles in an image. From the Texturizer dialog, choose the menu button to the right of the drop-down texture list and you'll be able to add as many of your own textures as you like.



4 Alternatively, you could resort to blending mode trickery, and make creative use of Burlap and Canvas textures on separate layers. By merging the two effects, and altering the opacities of these blended layers, you can get a less 'impressionist' version of the image than if you used the Water Paper filter in combination with the Watercolor filter.

Chapter 3

PAINT, INK AND DRY MEDIA TECHNIQUES

In this chapter...

- ☐ *Learn the differences between oils, acrylics and watercolours*
- ☐ *Discover different techniques for applying inks*
- ☐ *See how the different dry media are applied*
- ☐ *Explore the potential of the humble pencil*

With a little understanding of the main media types, and how the physical artist might apply them, we can begin to understand how best to emulate various styles in Photoshop

By far the most important element of a work of art in terms of influencing its overall appearance is the medium used, and the technique by which that medium is applied to the surface of the canvas being used for that project. Over the next chapter, we'll be looking at the three main types of natural media, and at how the different types of paints, inks and dry media can be used by the traditional artist, so that we can better appreciate how to emulate them realistically using Photoshop. Armed with this knowledge, we can make more subtle, informed adjustments, and add those

all-important touches that will help us to move away from the rather clinical, computer-generated look that automated filters can create.

Perfecting paint

When most people think about art they think about paintings. Whether watercolour, oils or acrylic, each type of paint has its own distinctive appearance and finish, and understanding the behaviours of each will play a crucial part in helping you to create the most realistic emulations possible.

As well as the particular dynamics of different paints, it's important to understand how and when they



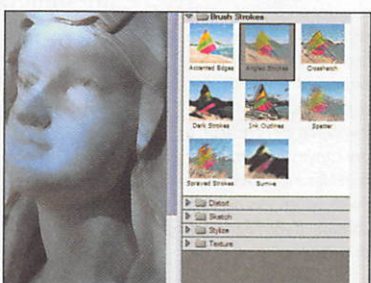
Page 35 Learn about key movements and developments in art history



Page 36 Think liquid media and you'll think ink, but it's not all black and white



Page 38 Using dry media doesn't have to involve getting your hands dirty



Page 39 *The humble pencil offers a whole range of artistic possibilities*

drawing, and applying too many conflicting styles can leave your artwork looking overly busy and, again, result in a look that you wouldn't find in a physical work of art. When working with dry media, with its varied range of methods and materials, you'll need to be aware of possible conflicts in terms of both substance and style.

By far the best way of finding out what you can and can't do is to study the works of natural media artists. You could simply read some books or check out a few websites, but why not pay a visit to your local art gallery? It could prove not just informative, but inspirational.

You may not think that such compatibility issues are relevant when you're emulating ink drawings, but it's important to bear in mind that there are different styles of ink

Types of paint

There are several types of paint media, and each one produces its own distinctive look



Watercolour techniques

Terms such as wet-on-dry and dry-on-dry refer to the relationship between the brush and the canvas. For example, the wet-on-dry watercolour technique involves a wet brush on a dry canvas. Each method provides a different look and finish, which you need to consider if you're emulating these styles.

There are many types of paint, from familiar and commonly used watercolour, oil and acrylic media, through to more specialised enamels and lacquers. Watercolours are generally applied by brush; the most common techniques are wet-on-dry and wet-on-wet, and the dry brush techniques dry-on-dry and dry-on-wet. Colour can be removed while still wet by blotting, which creates a softened effect.

In contrast, oils are slow-drying paints, which dry with a hard film; this protects the brightness of the

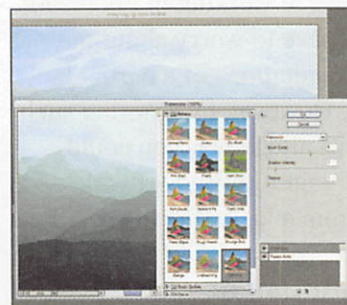
colours with a matt, semi-gloss or gloss finish. Typically, oil paints are applied to a material canvas, although some artists may prefer to use a board.

A similar finish can be achieved with acrylic paint, which is a relatively recent medium produced from polymerised acrylic acid esters. Acrylics are a little more versatile than oils and watercolours; they have the advantage of being adaptable to many types of canvas, and drying much faster than oils without any loss of colour.

MIXING YOUR MEDIA

Oil and water don't mix – so you need to keep some media apart

If you recall your science lessons at school, you'll remember that certain substances simply don't mix. And although more established painters might experiment with mixing media, there are a few fundamental rules which should be considered before you start applying filters to your images. Oil-based paints and watercolours shouldn't be mixed; you wouldn't find such a combination in a physical work of art – so even though you can create such a look in Photoshop, this should be avoided. The most realistic conversions of images will always take into consideration the physical limitations of the chosen media.



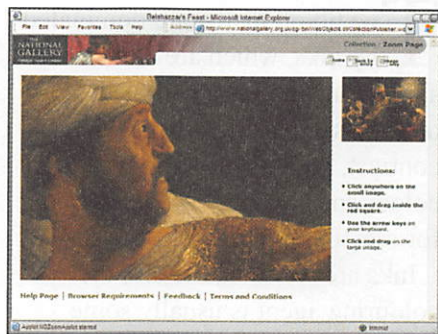
Conflicting styles might look quite impressive, but your work will appear unrealistic to the trained eye

Learn from the masters

Even if you've never picked up a paintbrush, a trip to a gallery should provide inspiration

Even the most casual observer of art will be aware of the great variety of styles that have been developed over the years. Picasso, Matisse and Van Gogh may have shared the same media, but the works they created were very different, and becoming familiar with the styles and techniques of such masters will be invaluable as you attempt to emulate them.

We've listed some of the pivotal artistic styles below. With the right combination of style, media and canvas in mind, you'll be in a much



The National Gallery's website allows you to view the paintings in the gallery's collection, and learn about the artists who create them

stronger position to convert your images, and make them that little bit more persuasive.



The National Gallery

You should find plenty to inspire you on the National Gallery's website, at www.nationalgallery.org.uk. The collections that are available to view online are organised by artist and genre, making it easy to find what you're looking for.

ART MOVEMENTS

- ☐ **FOR MORE LITERAL** interpretations of subjects you should look to the Realists of the 18th and 19th centuries, such as Toulouse-Lautrec, who would attempt to recreate a scene exactly as it appeared, inspired by the earlier efforts of Renaissance artists like Leonardo Da Vinci.
- ☐ **THE IMPRESSIONISTS** of the late 19th and 20th centuries included Monet and Renoir. These artists would paint scenes more as they perceived them, rather than producing literal interpretations.
- ☐ **MORE CONCEPTUAL** art movements include Surrealism, popularised by the likes of Dali and Rousseau; Cubism, as typified by Picasso and Chagall and the Abstract artists, such as Jackson Pollock.
- ☐ **POP ART** provides a more brash and colourful take on modern art, inspired by comic strips and advertising imagery. For examples, check out the work of artists such as Andy Warhol and Roy Lichtenstein.



The Tate

If you prefer more contemporary art, you might like to check out the Tate Modern. If you can't make it in person, go to www.tate.org.uk, and browse the many galleries and works available.

Working with ink

There's more to ink than the black stuff in a jar, and ways of applying it other than with a pen



Lithography

Lithography is a method of printing that uses a prepared flat plate containing an image produced using a grease-based substance, such as crayon or tusche, and washed. When ink is applied, it sticks to the greasy drawing but runs off the wet surface, allowing the print to be created.

The liquid media are dominated by inks, which are commonly applied in fine lines with pens, or as washes, using brushes. In contrast, paint is primarily used for colour and shading, and less often for creating linear works of art.

Inks are water-based, and the colouring agent is usually some form of carbon, although sepia ink is made from the natural dye expelled by the cuttlefish as camouflage. The white pigments which are an essential complement of dark inks are manufactured from metallic

substances, usually either lead or zinc. Coloured paints, whether made by hand from natural materials or mass-produced, are made using a variety of materials and processes.

Ink is also available in solid form, moulded into cakes or sticks which are ground and mixed with water to produce liquid. These solid inks are often called Chinese ink, Japanese ink or sumi-e ink. They allow a little more variation in the application of the ink, although the medium's fast drying time will influence how the artwork is created.

CHOOSING THE RIGHT IMAGE

Inks are only suitable for creating certain types of artworks

Inks are synonymous with sketched or illustrative work, and not all images can be successfully converted into the medium. Images that rely on colour and texture – such as landscapes – won't work well due to their inherent subtleties. A far more suitable image will be one that contains more clearly defined shapes, such as a portrait. Such an image will by its nature contain higher levels of contrast and detail, which can be converted more effectively using the various filters that Photoshop provides. But remember to apply your chosen effects with a light touch, otherwise your converted image could look unrealistic.



Photoshop's sumi-e filter emulates the look of a wet brush and black ink applied to rice paper

A history of pen and ink

The tools may have changed over the years, but the end results are much the same

Brushes have never offered the precision necessary for ink, and it was recognised early on that a single flexible tube that could be sharpened to a point could be used to create finer, more precise lines.

Reeds and feathers provided the earliest tools, offering flexibility and durability. Reeds produced strong lines reminiscent of calligraphy, although these were superseded by the feather quill; this was often made from the feathers of particular birds, with the plumage of the raven and crow producing the best quills for



The Russian State Hermitage museum houses one of the earliest pen and ink illustrations, Robert's Group Portrait of the Este Family

detailed work. The modern metal nib pen was only introduced towards the end of the 19th Century.



Brown inks

Old Master ink drawings, such as Stefano della Bella's *Allegory of the North Wind*, take on a brown hue not because of ageing, but due to the materials used to produce the ink.

INKS OF THE OLD MASTERS

- ☐ **BISTRE** is an ink that was used by the Old Masters, made from chimney soot dissolved in wine, water or even urine. The colour of bistre varied according to the wood from which the soot was derived, but in general had a warm, transparent brown tone.
- ☐ **IRON-GALL INK** is another media synonymous with the Old Masters, and was used for both writing and drawing. Iron-gall ink is less transparent than bistre, but is only clearly distinguishable from bistre when it has been applied in heavy concentrations.
- ☐ **THE TERM SEPIA**, which properly denotes the brownish-black ink made from the dark liquid of the cuttlefish, is commonly misused as a generic term for any brown ink. Genuine sepia inks are sold as cakes of pigment, which are mixed with water by the artist.



Ink without the pen

Although we use the term pen and ink, other tools and techniques can be employed to soften images, such as the washes and brushes used in the Japanese sumi-e style.

Dry media

Before you can emulate the look of dry media, it helps if you understand how they're applied



Metalpoint

A related form of dry media is metalpoint, which involves scraping a metal stylus over an abrasive surface, leaving particles which produce a faint greyish line; this becomes more apparent as the particles oxidise. Artists of the 15th and 16th centuries would create such works on papers coated with bone-dust or chalk, which was often tinted. You can find out how to emulate a metalpoint engraving on page 96.

The term dry media embraces a number of different natural and synthetic mineral or plant-based substances that deposit crystalline or splinter-like fragments into the fibres of the canvas to which they're applied. Because such media don't completely adhere to the canvas, they provide a more malleable finish, which can be manipulated by hand – for example, by smudging – once they've been applied.

The main forms of dry media are chalk, charcoal, pastel, crayon and pencil. Each media has numerous

variations, which lend themselves to particular applications. Some, such as pastels and crayons, are available in a wide variety of colours and consistencies while others, such as chalk and charcoal, are used to create two-tone images.

To withstand the test of time, all dry media need to have a fixative applied. Without this, artworks will deteriorate rapidly should they be rubbed or mishandled. A fixative is a liquid applied by brush or spray to act as a protective lacquer once a work is complete.

DRY MEDIA TOOLS

A stick of chalk may not offer the best method of application

Although dry media are usually applied directly, there are occasions when a particular finish is required, and the traditional artist must turn to dedicated tools. The most versatile tool of all is the finger, which can be used to smudge artwork to create softened edges or blend colours. This effect can be emulated in Photoshop using the Smudge Tool. Alternatively, more specific application of a medium is possible using a tool known as a stump. This resembles a leadless pencil but is made from a softer texture, such as leather or felt, and enables an artist to apply chalk, pastel or charcoal with its tip to blur lines or create shading.



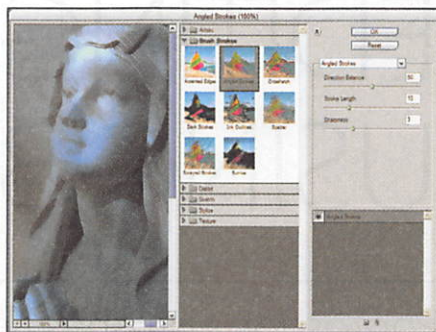
With the Smudge Tool selected, check the Finger Painting option to rub in chalk with a 'finger'

The pencil

A surprising variety of artistic effects can be produced with the humble pencil

The graphite content of the regular pencil was in former times referred to as a plumbago, or black lead, because it closely resembled raw lead pieces. The first pencils were formed by cutting lumps of graphite into thin slivers, which were then placed between wooden or metal callipers.

The pencil offers the artist a vast number of possibilities, and lends itself well to sturdy, smooth drawing papers, especially when detail is called for. However, a degree of experimentation is necessary; the



Although a Brush Strokes filter, the Angled Strokes filter can provide an effective pencil-like conversion with a little manual configuration

paper chosen for a soft pencil may not work as well with a hard pencil, and vice versa.



The Pencil Tool

Despite its name, Photoshop's Pencil Tool does little to emulate a real pencil: it's actually just a one-pixel-wide brush. However, you can adapt it through the brushes palette to emulate its physical counterpart that little bit more accurately.



Surface tooth

Tooth is a phrase used in artistic circles to describe the feel of a working surface; the more tooth a canvas has, the rougher it feels to the touch. The tooth of a canvas is particularly important when you're working with dry media.

VARIATIONS ON THE PENCIL

- ☐ **THE REGULAR PENCIL** comes in a variety of grades that denote the hardness of the lead. The familiar HB pencil lies at the middle of this range, with 9H being the hardest lead and 9B being the softest. Harder pencils are most often used for drafting purposes, while softer grades are usually preferred by artists.
- ☐ **THE CONTÉ CRAYON** was created during the Napoleonic Wars and named after its inventor, Nicolas Jacques Conté. It originally consisted of a combination of graphite and clay which produced a soft finish. The Conté crayons of today are actually a variety of fabricated chalk.
- ☐ **GRAPHITE IS A FORM** of carbon with a grease-like texture. It generally comes in lump or powder form, and is applied to paper that has a very slight tooth. It can also come in the form of hexagonal sticks, like large crayons, which are used for more detailed work.

Chapter 4

SELECTING, EDITING AND USING BRUSHES

In this chapter...

- ☐ Explore the potential of the Brushes palette
- ☐ Create your own custom brushes
- ☐ Use textured brushes to get realistic results
- ☐ Produce convincing airbrush effects
- ☐ Blend your images using brush strokes

Photoshop's brushes are the primary tools that you'll use to emulate the effects of paints and other media, and there's a lot more to the Brush Tool than bristles...

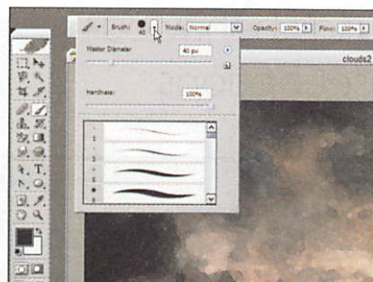
The Brush Tool is possibly the most important tool in the Photoshop toolbar. You may have used it to apply virtual paint, edit masks or fine-tune selections, but such applications only draw on a fraction of the tool's potential, and although you've probably changed the brush size, and perhaps tweaked the odd setting, you'll probably be surprised to find over the next few pages just how much the tool is capable of, especially when used as a more creative implement.

More than a brush

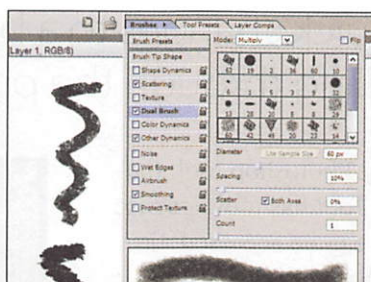
However, don't let the Brush Tool's name mislead you; it's not all about

bristles. With a few modifications in the Brushes palette we can create virtually any kind of tool, including a palette knife and a pencil; Photoshop's related Pencil Tool is actually just a derivative of the regular Brush Tool, albeit with a limited configuration that restricts you to drawing a single-pixel line free-hand. But with a little tweaking, and the aid of a graphics tablet, there's no reason why you can't modify the Pencil Tool so that it performs more like the real thing, even to the extent of emulating different lead hardnesses.

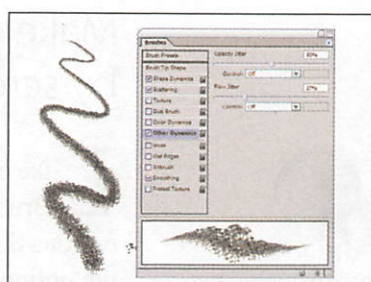
Before we can start carrying out such modifications, though, we'll



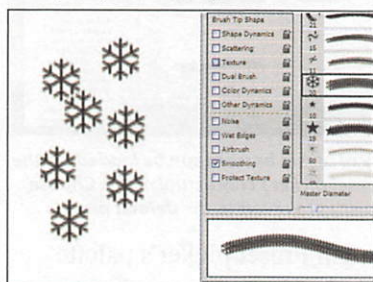
Page 42 Photoshop's preset brushes offer plenty of creative possibilities



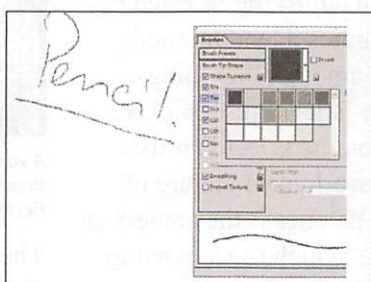
Page 43 The Brushes palette provides a wealth of customisation options



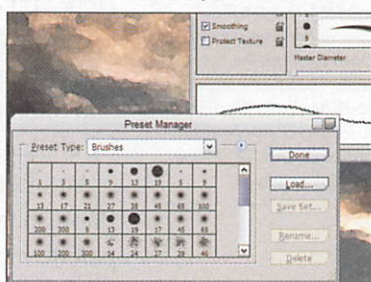
Page 44 Discover how to create your own brushes with unique characteristics



Page 46 Take a look at some of the more unusual preset brushes



Page 48 Photoshop's Pencil Tool needs a little help to produce a realistic effect



Page 49 Take control of your custom brushes using the Preset Manager

need to master the Brushes palette; this is the interface from where brushes are selected, edited and managed. We'll take a detailed look at the Brushes palette in this chapter, and touch on other brush-related subjects, such as emulating textured brushes and airbrush tools.

Creative brushwork

We'll also be taking a closer look at how we can blend together the pixels in an image through the use of blending modes. We've already covered blending modes in relation to layers, and seen how this feature can be used to influence an image through the application of a texture.

However, blending modes make themselves available throughout Photoshop, and can be used with the Brush Tool to apply more subtle brush strokes, and achieve a more realistic finish. The ability to blend the strokes and colours of a medium is an integral aspect of the creation of physical art, and learning how to reproduce such effects digitally will lead us nicely into the next chapter, on blending media.

But first, we'll need to master our brushes, and this chapter, combined with the preceding chapters on the canvas and the various media, will complete our look at the tools of the artist's trade.

Accessing your brushes

Make quick changes to a brush's behaviour by scrolling through the preset options

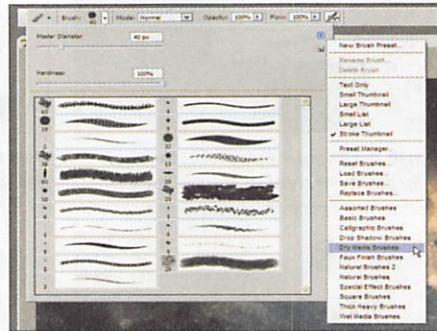


Variations on a theme

You don't need to make do with the default brushes available through the options bar drop-down list. Open the Brush Preset picker's palette menu and you'll be offered the chance to load a variety of artistic brushes, such as Dry Media and Calligraphy.

Like any Photoshop tool, the Brush Tool has tool-specific options that can be accessed via the options bar at the top of the screen, below the menu listings. Here you can adjust the selected brush's dynamics, blending mode and opacity, among other things, and open the Brush Preset picker by clicking on the selected brush.

An often-overlooked feature of Photoshop's palettes is the contextual palette menu, which is accessed by clicking on the small circular icon with a black triangle in the centre.



A variety of preset brushes can be loaded via the Brush Preset picker's contextual menu. Choose **Reset Brushes** to revert to the default presets

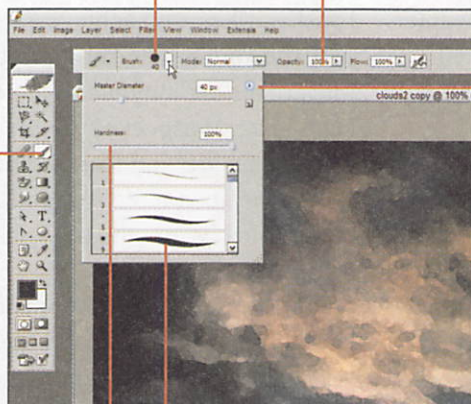
The Brush Preset picker's palette menu features a number of options for loading and managing brushes.

BRUSH TOOL OPTIONS

Clicking on the downward arrowhead beside the current brush will open the Brush Preset picker, extending your options by providing preset variants on the tool.

The Brush Tool is grouped together with the Pencil Tool; both become selectable when you hold down the mouse button with the cursor over the visible toolbar icon.

The selected brush's diameter and hardness can be adjusted in the Brush Preset picker.



Remaining options bar settings provide general controls for the selected brush. You can select a blending mode, adjust opacity and ink flow, and enable airbrush capabilities.

The Preset picker's palette menu enables you to load numerous non-standard brush alternatives for more creative work.

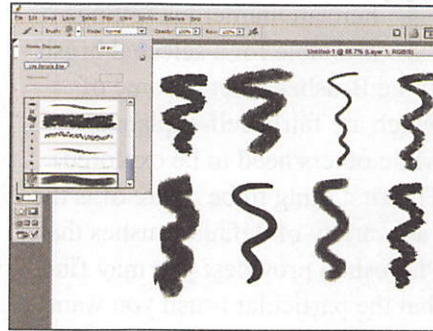
There are many predefined brush styles to choose from, including ones for creating wet-edged, charcoal and other unusual affects.

The Brushes palette

Photoshop affords you virtually unlimited control over the customisation of your brushes

The Brush Tool's contextual options enable you to carry out some basic alterations to a selected brush, but for control over more specific features, such as a brush's scattering, texture and general dynamics, you'll need to turn to the Brushes palette.

In both Photoshop CS and 7, the Brushes palette is located by default in the palette well to the right of the options bar. To make full use of the feature you'll need to select the Brush Tool, then choose the basic style of brush that you want to use.



With the Dry Media brush set loaded we can make use of the Brushes palette to further configure brush dynamics

Click on the palette's tab to open the palette, and view the various options that can be configured.



Free floating palette

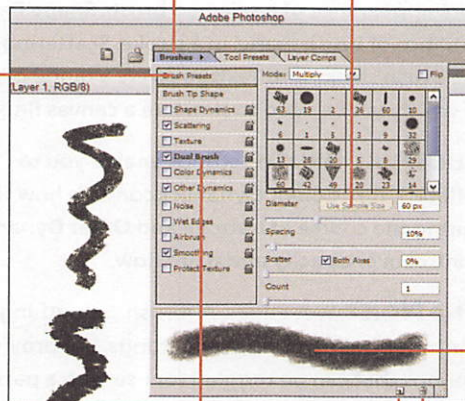
If you make regular use of the Brushes palette, and are annoyed by its constant disappearing act as it returns to the palette well, simply click on the palette's tab and drag it away from the well; the palette will become free-floating, and constantly available.

UNDERSTANDING THE BRUSHES PALETTE

The Brushes palette is opened by clicking on its tab within the palette well – you can also access it from the main Window menu.

With a brush selected you'll have access to the numerous settings in the left-hand column for more specific editing.

If you want to ensure that the settings for a particular property can't be changed, simply lock that property using the padlock icon.



Once a particular brush property has been selected, its settings become accessible in the right-hand area of the palette.

A preview of your brush stroke is available at the foot of the palette, and will update dynamically to reflect any changes you apply.

Once you've made the necessary changes, you can choose to create or delete the brush that you've configured using the icons at the foot of the palette.

Configuring brushes

Photoshop has a variety of predefined brushes, which you can configure to your heart's content

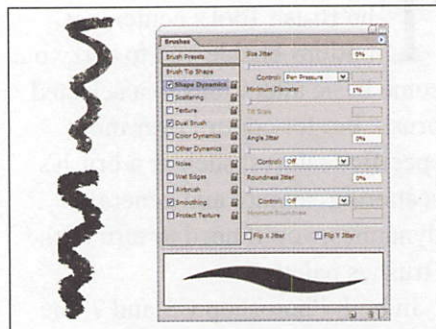


Brush presets

All the options that are available in the Brush Preset picker's palette menu can also be found under the Brushes palette menu.

There are numerous settings available for a selected brush in the Brushes palette, some of which are fairly self-explanatory, while others need to be explored. The first thing to be aware of is the vast variety of default brushes that Photoshop provides; you may find that the particular brush you want has already been created.

With the Brush Tool selected, your first port of call is the Brush Preset picker menu, or the Brushes palette menu. You'll see a number of brush sets listed at the foot of the menu, so



Activating various brush dynamics enables those using a graphics tablet to select Pen Pressure from the Control options

if, for example, you wanted a charcoal effect brush, you'd need to load the Dry Media Brushes.



Limited access

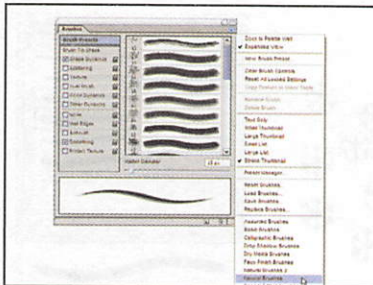
If you're not seeing the full range of control options in the Brushes palette, then the chances are you're viewing it in condensed mode. To expand the view, access the palette menu and select Expanded View.

BRUSH PALETTE SETTINGS

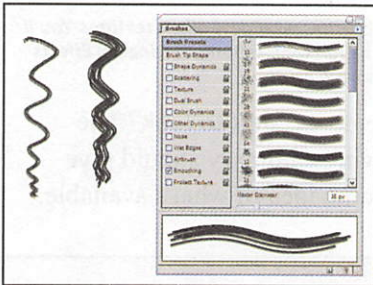
- ☐ **USE THE** Shape Dynamics, Scattering and Texture options to alter the core appearance of a selected brush. Shape Dynamics determines the variance of brush marks in a stroke, Scattering controls the density of the brush stroke and Texture offers a range of pattern options, some of which can be used to simulate a canvas finish.
- ☐ **THE DUAL BRUSH** settings enable you to create a brush with two different tips, Colour Dynamics controls how the paint colour changes during the course of a stroke and Other Dynamics gives you similar control over opacity and paint flow.
- ☐ **THE NOISE**, Wet Edges, Airbrush, Smoothing and Protect Texture controls have no dedicated settings, but provide self-explanatory on/off options that can be toggled for use with a particular brush.

Modifying brushes

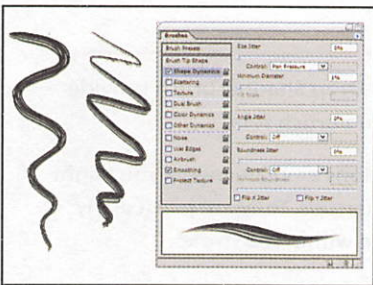
Having covered the theory, it's time to grab a brush and try our hand at some configuration



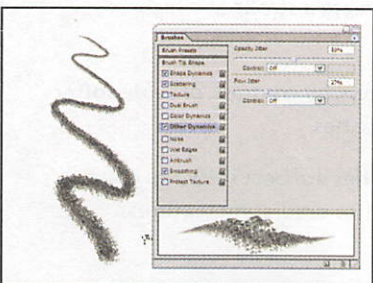
1 Create a new file and select the Brush Tool. Drag the Brushes palette away from the palette well so that it remains available, and doesn't return to the well after we test each setting. Open the palette menu, and select the Natural Brushes option from near the bottom of the list. OK the dialog that asks if you want to replace the current brushes, and load the brush set.



2 Select the Brush Presets option at the head of the left-hand options in the Brushes palette you'll be presented with a visual list of the brushes in the loaded set. Choose the first brush, Stipple 12 pixels, and apply a stroke to the canvas to see how it performs. Then move the Master Diameter slider above the preview to increase the size, and re-apply the brush to see the difference.



3 Next, check and click on the Shape Dynamics option, and you'll see how the preview adapts to suggest recognition of pressure sensitivity. Apply some more strokes; users of graphics tablets will notice how the thickness of the line reflects the amount of pressure applied through the stylus. Similarly, stroking the canvas with the pen at an angle mimics the effect of angling the brush.



4 Using similar options we can change the dynamics of the brush completely. For example, check the Scattering option and raise the Scatter to around 140%, with the Control option set to Pen Pressure. Then check the Other Dynamics option and raise Opacity Jitter to around 50%. Apply a stroke and you'll see how we've changed our regular brush, and given it the attributes of a pastel.



Save your experiments

As you can see, some incredibly realistic textures can be created with a little experimentation. Rather than having to recreate them at a later date, you can save them using the Create new brush icon at the foot of the Brushes palette.



Back to the well

Once you've finished making the necessary adjustments to your brush stroke, you may want to clear the Brushes palette from your desktop. Rather than closing the window, click on the palette's tab and drag it back to the palette well.

Textured brushes

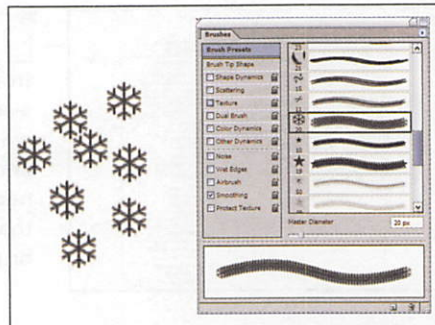
Explore Photoshop's default brushes and you may find just the one you're looking for



Finding new brushes

If you've been bitten by the brush bug you'll be glad to know there are lots more available for download online. Take a trip to the Adobe Studio Exchange (<http://share.studio.adobe.com>), where you'll find plenty of free examples.

By now you'll have a better grasp of how to adapt existing brushes through the Brushes palette, and, although we've taken a cursory glance at some of the alternative brush styles available, familiarising yourself with what's on offer will mean you don't waste time trying to recreate something that already exists. As we've seen, the default brushes are available via the Brush Preset picker, which is accessed from the options bar, or through the Brushes palette menu. But, with so many grouped brushes available,



Not all brushes provide realistic textures. You'll find some fun tools among the Special Effects and Assorted brushes

where do we start to look? The following summary should give you some idea of what's available.



Resetting your brushes

Although the various brush groups provide some useful variants for touching up details in your converted images, you'll need to return to the default brush set for general use. You can do this by accessing the Brushes palette menu and choosing the Reset Brushes option.

FACTORY BRUSH STYLES

- ☐ **THE BASIC** brush, Calligraphic brush and Drop Shadow brush provide simple features similar to those of the default brush sets.
- ☐ **THE DRY MEDIA** and Faux Finish collections emulate media you might apply by hand, such as chalk, charcoal and pastels. They are particularly effective as they emulate the canvas texture within the stroke.
- ☐ **THE TWO NATURAL BRUSH** options provide realistic brush strokes suited to dry brush painting; the brushes create a stroke in which individual bristle marks are visible.
- ☐ **THE THICK HEAVY** and Wet Media options, by contrast, provide softer strokes more suited to watercolours and washes.
- ☐ **THE ASSORTED** and Special Effects brushes are best suited to creative applications, although some could be used for emulating textures.

Airbrush emulation

If you don't have a graphics tablet, there are other ways of influencing how paint is applied

Many of the features that we've covered in this chapter draw heavily on the use of a graphics tablet as an input device. There's no doubt that anyone who's serious about their digital artwork should put a tablet at the top of their wish list, but how can you manage in the meantime? Fortunately, Adobe has included a number of features within the Brush Tool's configuration options that you can use to skirt around the problem.

If you select the Brush Tool and take a look at the options bar, you'll

notice a curious icon to the right of the Opacity and Flow settings. By clicking on this button, mouse users can enable their selected brush to take on the behaviours of an airbrush. Whereas a stylus user would imply the strength of a stroke through quick and natural pressured movements, the airbrush setting will at least mean that ink flows continuously through the brush tip if the mouse button is held down; without the airbrush option enabled you'll find that your ink is applied in a less realistic way.



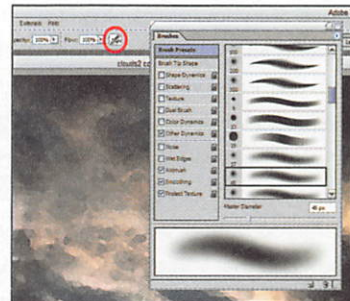
Airbrush? What airbrush?

The airbrush was one of the original tools found within the Photoshop version 1 toolbar, and it had a regular place there until version 7 was released. By this time, the Brush Tool had become so advanced that a dedicated airbrush tool was deemed unnecessary, and the feature became an option of the Brush Tool.

AIRBRUSH TIPS

Use layers and selections to 'spray-paint' more effectively

When you've configured a brush to act as an airbrush, you'll need to experiment to get the best results, especially if you're still using the mouse as your input device. It's advisable to work on a separate layer while you're practising, so that errors can be easily rectified without affecting your existing artwork. When you're happy with the results, you can always blend your layers together for a more natural texture. You may also find it useful to create selections to demarcate which areas of your work the paint will be applied to; you'll find that you can then apply a more localised 'spray' without losing any depth implied by the artwork.



The airbrush icon in the Brush Tool's options bar provides a shortcut to the option in the Brushes palette

From a brush to a pencil

The Pencil Tool bears little resemblance to its physical counterpart, but we can 'sharpen' it...



Realistic sketching

If you check and select the Shape Dynamics option and change the Control option to Pen Tilt, you'll have access to the Tilt Scale slider, which affects how Photoshop interprets the tilt of your stylus. With a high setting, you can create some realistic sketching effects, making it possible to draw with the side of your virtual pencil, for example.

The Pencil Tool is effectively a simple 1-pixel-wide brush, with no additional configuration other than a little smoothing. If you select the tool, and check out the Brushes palette, you'll see just how basic its parameters are, but, with a little modification, and the help of a graphics tablet, we can soon modify our pen to perform a bit more like the real thing.

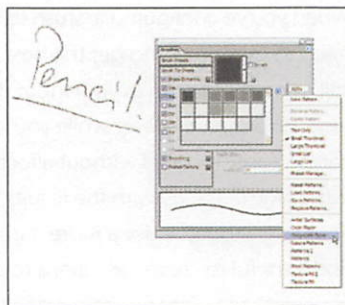
The most noticeable difference is the lack of any pressure sensitivity features, so check the Colour Dynamics option; you'll notice an

instant improvement with just this basic option enabled. Still within the Colour Dynamics settings, raising the Brightness Jitter to around 50% will give the tool a scratchier and less fluid ink appearance. If you then add a touch of Scattering, and raise the minimum diameter settings for the Pen Tilt controls under the Shape Dynamics option, you'll notice the stroke taking on the appearance of a soft pencil line. For a final touch, you might choose to complete the effect by checking the Texture option, and loading a suitable texture.

LOADING TEXTURES

Photoshop has more textures to offer than you might think

We've seen how we can load up whole new sets of brushes, rather than creating them from scratch, and it's the same with textures. If you tick and select the Texture option in the Brushes palette, and open the Pattern picker, you'll be presented with a relatively small number of textures. However, you'll notice the familiar palette menu icon located at the top-right of the Pattern picker. If you open this menu, you'll find that you can choose to load one of several sets of predefined textures, including Artist Surfaces and two paper options, which will be more appropriate for your natural media emulations than the default options.



Don't settle for the default textures; Photoshop has plenty of alternatives just waiting to be found

The Preset Manager

Save your lovingly created custom brush, and manage all your brushes, using this interface

Creating a new preset brush is as simple as making the necessary adjustments to an existing brush, and then choosing the Create new brush shortcut icon at the foot of the Brushes palette. When you've spent time creating a brush, it's a good idea to save it as a user-created preset, which you can draw on whenever you may need it in future. We've already seen that preset brushes can be selected via either the Brushes palette or the Brush Preset picker; they can also be accessed from the Preset Manager,

which can be opened from either the Brushes palette or the Preset picker, and which we'll introduce to you below. As well as loading preset brushes here, you can also rename existing ones and delete those that you no longer require.

You can likewise save any textures that you create, using the Save Patterns command in the Pattern picker's menu. Saved textures can be used with the Pattern Stamp, Healing Brush and Patch tools, as well as being selected in the Brushes palette's Texture options.



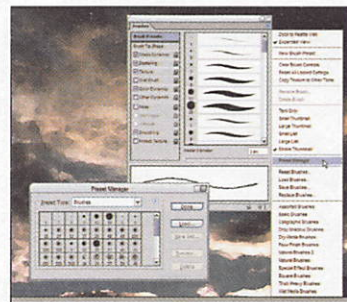
Back up your brushes

New preset brushes are saved in a preferences file, so that when you close Photoshop they'll be retained for the next session. If this file is deleted or damaged, your new presets will be lost. To back up your brushes, save them in a library using the Preset Manager.

THE PRESET MANAGER

Simplify control over all your presets with this centralised tool

The Preset Manager can be accessed from relevant palette menus, or by choosing Edit > Preset Manager from the main menu. It centralises the management of brushes, patterns, swatches and several other features that make use of presets, such as tools and gradients; you can easily load or delete sets from this single interface. In most cases, when you make a change to a preset, Photoshop will prompt you to save the changed item as a new preset when you close the image file. Needless to say it's a good idea to do this, to make sure any assets that you've created or rely on are still available when you next load the file.



The Preset Manager can be accessed from numerous interfaces, including the palette menus of relevant tools

Chapter 5

BLENDING WITH TOOLS, FILTERS AND LAYERS

In this chapter...

- ☐ Use the Liquify filter to distort images
- ☐ Learn to smudge your artwork convincingly
- ☐ Use the Sponge and Blur tools to apply more subtle effects
- ☐ Soften the effect of filters with the Fade command
- ☐ Harness the power of adjustment layers

Once you've converted an image using one of Photoshop's filters, you may decide that your artwork requires some further work, to blend in or fine-tune your chosen effect

Even the most naturally gifted artist will need to spend some time experimenting with their chosen media in order to get the best results. Watercolour, oil and acrylic paints all have very different characteristics, as do the various dry media, and mastering them requires the investment of considerable time and patience, not to mention a fair amount of trial and error.

The luxury of layers

A traditional artist will start out with a canvas, and a selection of paints, which will be applied in a certain manner to create a painting. When we're emulating such works

in Photoshop, however, we have a big advantage over the traditional artist in that we can work with layers. Being able to place content on independent, moveable layers affords us certain luxuries; for example, we can change the stacking order of layers, and edit their opacity, to change the appearance of an image at any time.

A traditional artist, on the other hand, has far less scope for making changes, and must rely heavily on advance planning. We need to bear this in mind when emulating natural media artworks; if we rely too much on layers and other Photoshop tools, the end result will look unrealistic.



Page 52 See how the Liquify filter's tools can turn your pixels into putty



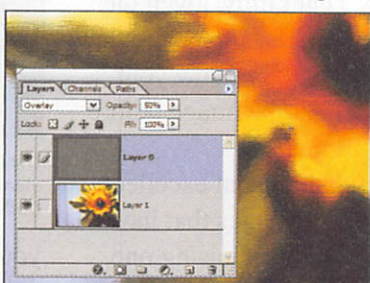
Page 53 Use the Liquify filter to apply some finishing touches to a painting



Page 54 Let your imagination run wild as we put some old tools to new uses



Page 56 Adapt Photoshop's darkroom tools for use on your converted artwork



Page 58 Soften your effects using the Fade command and blending modes



Page 59 Add non-destructive finishing touches using adjustment layers

Consider the charcoal artist, who applies his media directly from the stick before touching up and blending in more subtle details by hand. Although we can reproduce these effects digitally, we need to take account not just of what the artist does, but how he does it.

Similarly, the painter will mix his colours – either on the palette or directly on the canvas – to create specific colours or effects. For all its versatility, we can't emulate this kind of dynamic behaviour in Photoshop, although there are methods that we can employ to mix existing content, and further blur the distinction between

computer-generated artwork and that which has been created by hand.

Creative thinking

It's easy to forget that Photoshop isn't a dedicated art package, and, while it can do some pretty amazing things, its tools and features are primarily designed for the modification of photorealistic content. To create the kind of results required to emulate natural media convincingly, you'll need to start thinking 'outside the box', as you devise new and unique applications for existing tools – the following pages should give you a few ideas on how to get started.

The Liquify filter

Add a touch of flair by warping and distorting your images 'by hand', using a variety of tools



Reset the image

The Liquify filter works best in moderation, although if you do find you've overdone things you can quickly undo an action using the regular keyboard shortcut of [Control]+[Z] on a PC, or [Command]+[Z] on a Mac. If necessary you return the filter's settings to their defaults by holding down the [Alt] key; this changes the Cancel button to a Reset option.

The Liquify filter, accessed by choosing Filter > Liquify from the main menu, provides a range of tools for magnifying, melting, smearing and otherwise distorting your images. Thankfully, given the power of the tool, the filter's preview pane enables you to see how your settings will affect the image before you commit to them.

The Liquify filter is an excellent choice for giving images that have been initially converted using one of Photoshop's conventional filters a hand-finished look. For example,



The Liquify filter can be accessed from the Filter menu; it's grouped with the Extract Filter, Filter Gallery and Pattern Maker in Photoshop CS

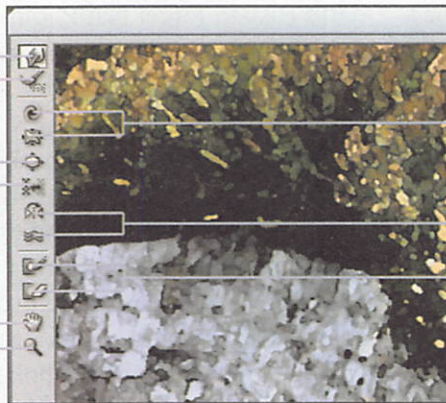
you might use it to blend together colours, as the filter can emulate a canvas filled with wet paint.

THE LIQUIFY TOOLS

The Warp Tool enables you to produce basic distortion effects, while the Reconstruct Tool facilitates controlled restoration of specific areas.

The Bloat Tool has the opposite effect to the Pucker Tool, while the Push Left Tool moves pixels to the left if the tool is dragged up, or to the right if it's dragged down.

The Hand and Zoom tools are borrowed from the main Photoshop toolbar, and perform their usual functions here.



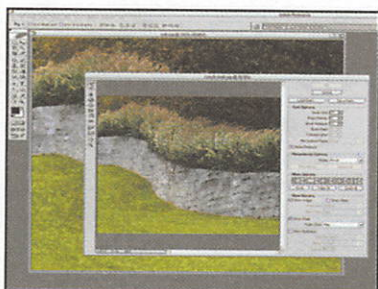
The Twirl Clockwise Tool is self-explanatory, while the Pucker Tool will move pixels towards the centre of the brush area.

The Mirror Tool duplicates and reflects content; the Turbulence Tool scrambles pixels for a more random effect, producing fire or wave-like effects.

The Freeze Tool is used to protect selected areas from changes made to the image; the Thaw Tool is used to make these isolated areas editable again.

Blending with the Liquify filter

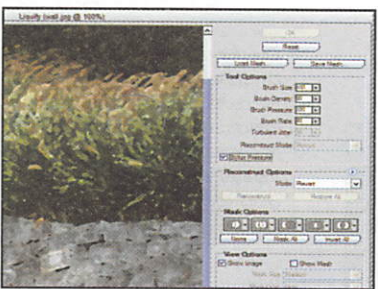
Add some finishing touches to an image, and explore the potential behind the filter's tools



1 Open the wall.jpg file from the CD and go to Filter > Liquify. Before you make any adjustments, take a moment to familiarise yourself with the layout of the filter window. The tools are arranged to the left of the large preview area, while the right-hand side contains the various configuration options. There are also magnification controls available in the lower status bar.



2 Zoom into the image to 100%, and use the Hand Tool to scroll the image so that you can see elements of the grass, wall and shrubbery in the preview. Select the Pucker Tool; if you need to make any adjustments to the brush, you can do so using the Tool Options to the right. Follow the edges of the path with the tool, and you'll see how it contracts the pixels, enhancing the definition.



3 Next, select the Bloat Tool, with a relatively generous brush size of around 100 pixels. Experiment by dabbing – but not dragging – areas within the background shrubbery; you'll see how the tool creates extra volume. If you have a graphics tablet, check the Stylus Pressure option, and you'll see how the effect varies depending on the amount of pressure applied.



4 You'll soon discover how random some of the effects can be, so protecting areas of your artwork is essential. Masks already applied to the image are recognised within the filter, and additional masking options are available in the right-hand settings, while the Freeze Mask Tool provides a easy way of applying masks, which can subsequently be removed using the related Thaw Mask Tool.



Wall.jpg

Use the wall.jpg file from the CD to carry out the following steps. The image is a photograph that has been run through the Sponge filter, creating a basic mottled appearance which could benefit from some further enhancement.



Masks and selections

The Liquify filter will recognise any existing masks applied to an image.

For a quick method of creating new masks, simply make a regular selection around the area you want to change before applying a tool; this automatically masks off regions of your image outside the selection.

Blurring the boundaries

Adapt the Smudge Tool to mimic the effect of using your finger when emulating dry media



Finger painting

The Smudge Tool gives you the option to work in Finger Painting mode. If you're working in this mode, you can temporarily switch the tool to normal mode by holding down the [Alt] key (the [Option] key on a Mac).

The Smudge Tool will be familiar to photographers as a digital darkroom accessory, but it can also prove useful when you're emulating natural media. The tool can simulate the action of dragging a finger through media, picking up pixels where the stroke begins and pushing them in the direction in which the tool is dragged.

The tool is particularly good for emulating dry media techniques. A real artist would use their finger to blur chalk or charcoal to blend colours, reduce detail throughout



With the Chalk & Charcoal filter applied, you may feel that individual strokes are too strong; using the Smudge Tool will soften the effect

less prominent areas of an image, such as the background, or to emulate a depth of field effect.

THE SMUDGE TOOL

The Smudge Tool is effectively applied using a brush, which can be configured and saved in the same way as other brushes.

The tool is grouped with the Blur and Sharpen tools in the toolbar. If it's not initially available, click and hover the cursor over the visible tool to expand the options.

Blending modes can be applied to soften or enhance the effects of the tool.



Checking the Use All Layers option can help you to create more realistic effects, as a multi-layered image will be treated as though it were flattened (see page 57).

With the Finger Painting option checked, the tool will apply paint to the canvas, rather than manipulating existing colours.

The Strength option offers some variation to mouse users, although those with graphics tablets will benefit from enabling Pen Pressure options for the brush.

Mastering the Smudge Tool

With a little practice, you'll soon be blending your images like a chalk and charcoal artist



1 Open the *angel.jpg* file from the CD and take a moment to study it. The image has been created by simply running a regular photograph through the Chalk & Charcoal filter, using the default settings. If you take a closer look at the highlights and shadows, you'll notice that the strokes have become too defined, due to the extreme contrast of the original image.



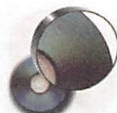
2 Select the Smudge Tool and open the Brush Preset picker. We've chosen a soft-edged dynamic brush with a diameter of 30 pixels, as we've estimated this to be the size of a fingertip in relation to the drawing's strokes. Leave the blending mode set to Normal and reduce the Strength to around 50%, unless you have a graphics tablet, in which case leave it at 100% to make use of its full dynamic range.



3 With the brush configured, return to the image and zoom in to the face until you're viewing the image at least at 100% magnification; you'll see how the highlights in the region have very defined strokes. Carefully brush inwards from the edges of the whiter regions, and you'll see how the chalk blends, just as it might if were you performing the action on a physical drawing with your finger.



4 Repeat the process for the darker areas, and you'll notice the image start to take on a much softer appearance. However, you may also notice that some contrast is lost as colours are merged. One method of bringing back these highlights or shadows is to check the Finger Painting option, and use white or black to enhance the contrast.



Angel.jpg

Use the *angel.jpg* file from the CD to experiment with the Smudge Tool. The image is a photograph of a statue that has been run through the Chalk and Charcoal filter using the default settings; it could do with some manual adjustment to smooth things over.



Save your 'finger'

Once you've configured the brush to simulate a finger, you may want to save it for future use, but, rather than save it as a brush, expand the Tool Preset picker in the options bar to save it specifically for use with the Smudge Tool.

The Sponge and Blur tools

If you're looking for a more subtle effect, turn to these relatives of the Smudge Tool



Watch your History

Working with the various tools featured in this chapter often requires multiple operations, which can quickly fill up your History palette. To be on the safe side it may be advisable to back up your file, create a History snapshot or make changes on a separate layer, so that you can easily revert to earlier versions of your work. For more on the History palette, see Chapter 6.

The Smudge Tool is great for blending together dry media strokes to create strong blur effects, which can be used to emulate background blur or focal depth of field. But, if you need to produce a more subtle effect, you'll need to spend some time experimenting with the tool, unless you can take advantage of the pressure sensitivity options offered by a graphics tablet.

However, there are other blending options available, in the shape of the closely related Sponge Tool, found grouped with the Dodge and Burn

tools, and the Blur Tool, grouped with the Sharpen and Smudge tools. These tools are more usually associated with the digital darkroom, but there's no reason why they can't be used creatively in your artwork.

As their names suggest, the Blur Tool softens hard edges or areas in an image to reduce detail, while the Sponge Tool subtly changes the colour saturation of an area, depending on the mode selected in the options bar. With a little experimentation, you'll soon see how they can enhance your work.

THE DIGITAL DARKROOM TOOLS

Understanding how these tools work will help you to adapt them

The various digital darkroom tools are frequently used by photographers to make more localised changes to an image than are possible using the Image > Adjustments menu. The Blur and Sharpen tools can be used to decrease or increase contrast in specific areas of an image, while the Sponge and Smudge tools present different approaches to softening images that can be useful for emulating merged media. The Dodge and Burn tools, which are used to lighten or darken areas of an image, may not seem particularly relevant, but you'll find that there are occasions when they prove to be just the tools for a particular job.

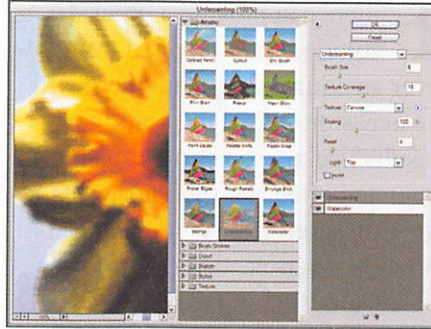


Using the Dodge and Burn tools you can make specific adjustments to the tone of the canvas and the image

Merging with filters

Save time and effort merging your natural media effects by turning to the filter menu

So far, we've looked at how we can merge specific areas of an image using various tools and the Liquify filter, but there may be occasions when you can save time and effort by using the more conventional Photoshop filters. We'll be looking at these in more detail in the following chapters, but we've picked out a few below that will be of particular help when you're merging existing media textures. They can be especially effective when used on an image to which one of the more artistic filters has



The Filter Gallery found in Photoshop CS makes it easy to experiment with mixing different filters prior to rendering the results

already been applied; try a few on such images and you'll see how they help to create a more natural finish.



Safety in numbers

As filters can make dramatic changes to a layer's pixel content, it's a good idea to apply them to a duplicate layer. You can then hide the original untreated layer, safe in the knowledge that you can always go back to it if things do go awry.

EFFECTIVE FILTERS

- ☐ **THE SPONGE** filter creates an image with highly textured areas of contrasting colour, which appears to have been painted with a sponge.
- ☐ **THE GLASS** filter, found under the Distort options, is perhaps an unusual choice, but, with its variety of textured finishes, you're not restricted to purely glass effects; the filter provides some useful options for merging paint media.
- ☐ **THE OCEAN RIPPLE** filter is also found grouped with the Distort filters, and can provide some interesting results when you get the hang of its settings. It can produce the appearance of a stucco-like texture when used on a suitable image.
- ☐ **THE UNDERPAINTING** filter is grouped with the Artistic filters, but when combined with a filter such as Watercolor it can help to diffuse an image, as well as enhancing the appearance of a canvas texture.



Flattening layers

Not all applications recognise Photoshop layers, and if an image contains several layers, this can increase the file size excessively. In such cases you can merge your layers into a single layer to reduce the size of the file. This is achieved through the Layers > Flatten Image command, but be sure to do this to a duplicate of your work, as you won't be able to revert the image. Some interesting blending effects can be obtained by duplicating the flattened layer, and experimenting with the various blending modes.

Fading effects

If you can't reduce the effect of a filter by altering its opacity, use the Fade command



Blending the fade

Although the full range of blending modes are available when working in the more familiar colour modes of RGB and CMYK, you'll find your choice is limited when you're working with Lab mode images. The Colour Dodge, Colour Burn, Darken, Difference and Exclusion blending modes won't work in this mode.

Filters can provide a quick-fix solution that's applied evenly over an entire image, but there will be occasions when they produce results that are too strong for the intended effect. In such instances, the little-used Fade command can provide much-needed control over the results, helping to reduce the impact of the filter.

The Fade command isn't restricted to being used with filters; it can be applied just as readily to a brush stroke, or to colour and other image adjustments. Once a particular

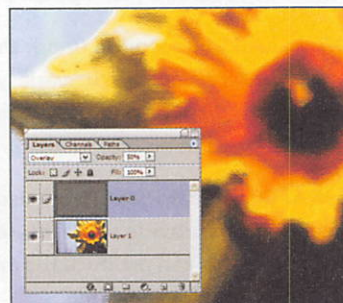
action has been performed, the Fade command will become available under the Edit menu.

When you select the command a dialog window will appear, in which you can drag a slider to adjust the visibility of the adjustment that you've just carried out. You'll see the fade being applied to your image as you move the slider, and you can then choose to OK the change, or cancel the fade altogether. For some effects, you'll also be given the option to specify a blending mode for the fade.

BLENDING LAYERS

You can also merge your filter effects by using blending modes

If the Fade command fails to create the anticipated result, you could try duplicating your image layer and experimenting with various blending modes. For example, you could try altering the blending mode of a duplicate to Overlay, to increase the contrast and boost colours, or you could use the Screen mode to add some subtle original detail, reducing the blended layer's opacity to vary the intensity of the effect. One method of adding some punch to an image is to desaturate the flattened duplicate before applying the Emboss filter. With this overlaid on the base layer, you'll find that edges are more defined, and colours more vivid.



Blending modes can provide a less destructive method of merging and enhancing an image's colours

Adjustment layers

Make non-destructive adjustments to your images that can be edited again and again

When you're experimenting with the various methods of merging your media you may create other problems that need addressing. For example, many blending modes can adversely affect contrast, and smudging or blurring dry media effects can easily create muddy, unattractive results.

You could choose to counter such unwanted side-effects by heading straight to the Image > Adjustments menu to alter an image's Levels or Curves, but this is a destructive method, as it permanently alters

pixel data within an image. A more flexible method is to use adjustment layers; these contain the relevant changes independently of the rest of the image, enabling you to make modifications without altering original pixel data.

To create an adjustment layer, you can use the option under the Layer menu, or the shortcut in the Layers palette. Once you've selected the adjustment type you'll be able to make the necessary adjustments; the new layer will be positioned above the currently active layer.



Levels and Curves

Levels and Curves provide a more precise method of boosting an image's contrast than the basic Brightness/Contrast image adjustment. Working with Levels and Curves enables you to adjust shadows, midtones and highlights independently; the Brightness/Contrast method raises or lowers the tonal range of the entire image.

WORKING WITH ADJUSTMENT LAYERS

Restrict the effect of adjustment layers by using clipping masks

An important factor to remember when working with adjustment layers is that they will affect all layers directly beneath themselves. This can create problems if you're working on large, multi-layered images; if the layer to which you're applying the adjustment layer happens to be near the top of your layer stack, the changes will be applied to much of the image. To get around this, use the Layer > Create Clipping Mask command to group the image and adjustment layers together. Using this technique you can apply multiple adjustments to a single layer. If you want to edit multiple layers you'll need to group them together in a layer set first.



A clipped layer makes itself apparent in the Layers palette by indenting itself above its parent layer

Chapter 6

WORKING WITH PHOTOSHOP'S FILTER TOOLS

In this chapter...

- ☐ Learn about the major differences between Photoshop 7 and CS
- ☐ Find your way around the CS Filter Gallery
- ☐ Discover how to blend filters
- ☐ Learn how to use the History brush
- ☐ Adjust textures using displacement maps

When you're ready to begin turning your images into natural media artworks, head for Photoshop's Filter menu; here you'll find all you need to emulate a wide range of styles

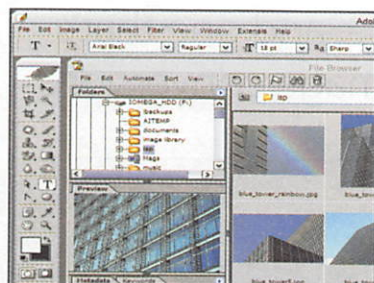
While Photoshop provides a wealth of tools and features that cater for the vast majority of image editing requirements, the software does have its limitations when it comes to creating and editing artwork that's intended to emulate the look of natural media. This is simply because Photoshop has been developed primarily for the manipulation of photorealistic bitmap content.

But that's not to say Photoshop isn't up to the job. You can get some excellent results using its impressive range of filters and other features. We'll be taking a closer look at the individual filters in the following

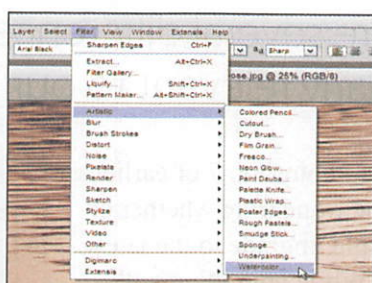
chapters; these versatile tools can be used to create some stunning results by themselves, although for the most realistic natural media textures a little further manual adjustment may well be necessary.

Photoshop evolution

Before we start looking at particular features, we need to address some issues that arise as a result of the various upgrades to Photoshop. Although the current CS version is now well established, many users will still be working with previous editions, and they can rest assured that the vast majority of filter functionality is available to them.



Page 62 There's more to Photoshop CS than the new Filter Gallery



Page 63 There are an awful lot of filters, but Photoshop keeps them organised



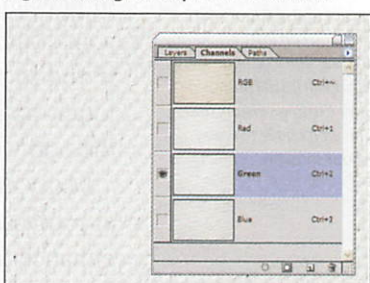
Page 64 The Filter Gallery gives CS a big advantage over previous versions



Page 65 There are alternative ways of blending filters if don't have CS



Page 67 Get creative with filters, and blend the results with the History Brush



Page 68 Displace your filtered images to produce a more hand-crafted look

There weren't too many significant additions to Photoshop's filter set until the introduction of the Liquify filter, which we looked at in the last chapter, with Photoshop 7. This was followed by the arrival of Filter Gallery with the current CS release. However, users of earlier versions needn't worry; with a little lateral thinking, the absence of these features can be worked around to such a degree that even those still using Photoshop 3 should be able to achieve perfectly acceptable results.

Old and new

To this end we'll be focusing on some of the more generic Photoshop

features over the following pages. However, to ignore the potential available that the Filter Gallery offers us – particularly in the context of emulating natural media – would be to bypass an important aspect of Photoshop CS. When we do make use of the Filter Gallery, and other features that aren't available to all Photoshop users, we'll point out alternative methods.

Whichever version of Photoshop you're running, the Filter menu will more often than not be your first port of call on the way to producing realistic natural media conversions, so let's look at what you'll find when you start to explore this interface.

Photoshop 7 versus CS

There are several differences – and one that's particularly relevant to our image conversions



Try CS for free

If you're tempted by the idea of upgrading to CS, but want to have a look at it first, you can install a 30-day trial version from the cover CD. It will install alongside your existing version, and you won't have to worry about software conflicts.

Users of Photoshop 7 or earlier may be wondering whether or not they should upgrade to the latest CS version. While upgrading will certainly give you access to a wealth of new and improved features, you won't find a huge amount of benefit if you're just using Photoshop to touch-up digital photos and create the odd work of art for fun.

Many of the new features are aimed at professional users, with particular enhancements for graphic designers and video producers. However, even novice users will find that the Filter



The Photoshop CS interface remains similar to that of previous versions, so upgrading should be a fairly painless process

Gallery, and some of the other features that we've picked out below, will soon become indispensable.



Corel Painter

Although Photoshop is the undisputed leader in the field of image editing, there's another application that's worth looking at if you're serious about digital painting. Painter, from Corel, is a dedicated application for creating artwork; you can check it out at www.corel.co.uk.

WHAT'S NEW IN CS

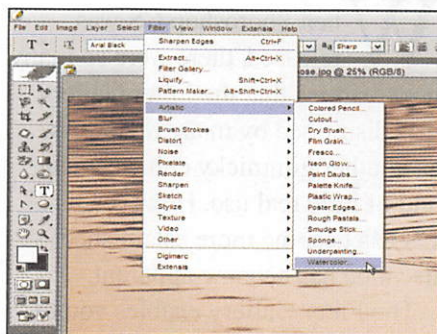
- ☐ **THE FILTER GALLERY** is a particularly useful feature when it comes to emulating natural media. With its ability to mix and match filters, and the order in which they're applied, it becomes possible to create some incredibly complex effects.
- ☐ **THE NEW SHADOWS** and Highlights tool offers CS users a simplified method of achieving a more natural balance between an image's shadows and highlights, without having to resort to the more complex Levels or Curves adjustments.
- ☐ **THE FILE BROWSER** has a number of enhancements that make it easier to retrieve images, such as keyword support.
- ☐ **LAYER COMPS** enable graphic designers to easily display different versions of a project to clients. You could equally make use of this tool to experiment with different effects as you convert your images.

Finding your filters

Photoshop has a bewildering array of filters, but they're well organised, and easy to get at

The Filter menu provides access to various quick-fix methods of adjusting your images, whether you're after simple sharpening or blurring effects or something more artistic. Although there have been occasional additions over the years, the filter line-up is effectively the same from Photoshop 3 upwards.

With so many options available it can take a while to become familiar with what's on offer. When you select a filter you'll be presented with a dialog screen offering various configuration options, along with a



With so many filters available to Photoshop by default you'll be grateful that they've been grouped logically into related submenus.

preview of the filter's effect. If you're running CS, selecting almost any filter opens the Filter Gallery.



View at 100%

When you're using filters you may be tempted to reduce the preview to fit the window, but this could mean that more subtle alterations can't be fully appreciated until the effect has rendered. Keep the view at 100% and you'll be able to keep an eye on even the slightest changes a filter may make to an image.

FILTER FAMILIARISATION

- ❑ **THE ARTISTIC** filters are the most relevant collection for our purposes, and include effects such as Dry Brush and Watercolor. There are also dry media options, such as Colored Pencil and Rough Pastels.
- ❑ **THE SKETCH** submenu contains filters that are more specific to dry media, including Chalk & Charcoal, Conte Crayon and Graphic Pen. However, effects such as Water Paper and Note Paper are also useful for application as textures to paint-based projects.
- ❑ **THE BRUSH STROKES** filters are self-explanatory, and are best used for creating more unusual brush effects that may not be possible using the Brush Tool alone. Such filters provide a good starting point for creating oil or acrylic conversions.
- ❑ **THE TEXTURE** options also do what their name suggests, providing methods of applying a canvas finish to a complete image.



Extending your filters

A vast number of third-party filters can be freely downloaded from the internet. The Adobe Studio Exchange (<http://studio.adobe.com>) is a good place to start, while a quick Google search will return dozens of plug-in sites for both Mac and PC users.

The Filter Gallery

This feature, new to Photoshop CS, enables several filters to be layered before application

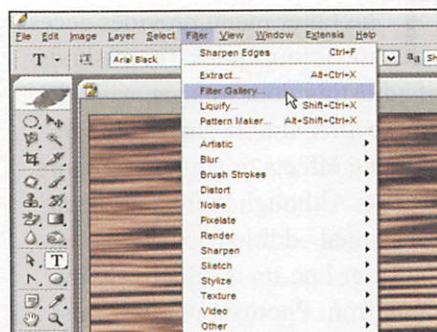


Instant repetition

Once you've applied a filter, you'll see that its name appears at the top of the Filter menu. Similarly, if you've used the Filter Gallery to create a more complex collection of effects, then the top item will be Filter Gallery. Either way, should you need to re-apply the last-used filter effect you can simply click on this entry, without having to go through the entire configuration process again.

When Photoshop CS was released, there were so many new features that the Filter Gallery was dismissed by many reviewers as a rather gimmicky enhancement, and of little real use. However, as CS has become more established, its value has become apparent.

The Filter Gallery enables you to apply filters to your image as you would normally, but, rather than rendering the results before applying another filter, you can preview how any number of filters will appear when applied together. You can also



The Filter Gallery is opened automatically when any of the regular filters are selected, or through the option near the top of the Filter menu

change the order in which the filters are applied, which can have a big effect on the resulting conversion.

THE FILTER GALLERY EXPLAINED

The available filter sets are grouped together as they are under the main Filter menu.

The Filter Gallery is dominated by the large preview area, in which you'll get an indication of how your selected filter, or combination of filters, will render.

Clicking the title bar of a filter set displays thumbnail previews of the various filters in that set.



The configuration options available to the right of the interface will change dynamically, depending on the filter selected.

The Filter Gallery's strength lies in its ability to create new layers on to which filters can be applied; the order of these layers can be changed, and you can toggle the visibility of a layer by clicking on its eye icon.

The foot of the interface contains options for adding and deleting filter layers, and changing the magnification of the preview area.

Blending filters

Using the Filter Gallery it becomes possible to create some highly complex effects

The Filter Gallery is more than a handy interface for previewing and applying filters; you can also reorganise the stacking order of layers to which filters have been applied, to create different effects. For example, you might want to convert a photographic image so that it looks like an oil painting; without the Filter Gallery you'd need to apply one filter to create the paint texture, another for the canvas texture and perhaps another to suggest ageing.

Using the Filter Gallery you can experiment with such multi-filter

effects, making adjustments to each filter's settings independently to see how different combinations will render. You can also re-order the layers, so that filters are applied sequentially from the bottom of the stack. This has obvious benefits; you wouldn't want a canvas texture to be applied on top of a stylistic one, for example. However, if you want to make adjustments to an image in between each filter application, then you'll need to revert to the 'old-fashioned' methods of combining filters.



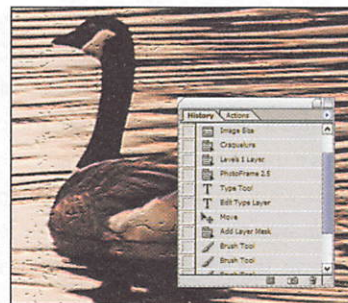
Reduced options

Although it might not be immediately apparent, not all the options listed under the Filter menu are actually available through the Filter Gallery. Most of the omissions are more production-related filters, such as Blur and Sharpen, although the Render and Pixelate options are two that you might want to take a look at.

LIFE BEFORE CS

Earlier versions of Photoshop call for a more calculated approach

Users of pre-CS versions of Photoshop will have to apply filters individually. This may necessitate some experimentation, but if you think the process through laterally you should be able to get the desired results. However, it's advisable to make back-ups of your work before you start in case you need to revert to your original image, perhaps so that you can try a different filter configuration. This method has the advantage of allowing manual adjustments to be made to an image between filter renders, so, if a basic conversion needs to be touched up using the tools we explored in Chapter 5, then even CS users will need to use it.



Working with back-ups or duplicated layers will ensure that you don't lose key stages of your image conversion

The History Brush

Be selective about how your filters affect an image by turning to this often-overlooked tool



Renaming snapshots

Just as you might rename layers to make them more identifiable, so too can you rename a History snapshot. Simply double-click on the default title, then you can type in a more meaningful description of the state.

The History Brush provides a more powerful way of blending together different effects, whether they've been created using filters or through manual adjustment. The tool enables you to paint elements of an earlier 'snapshot' of your history into the current image. You can apply numerous filters to your image, or make other changes – which can be save – via the History palette, as snapshots. For example, you can take numerous snapshots of changes you make with a painting tool or filter. After undoing the

change to the image as a whole, you can then use the History Brush to apply the change more selectively to specific areas.

Using the History Brush you can create some interesting mixed-media effects by using multiple snapshots, and painting the different effects back in. The tool is much easier to understand when you start working with it, so follow the steps on the next page and you'll soon realise just what is possible in terms of creating more individual, less-filtered, natural media conversions.

CREATING SNAPSHOTS

There's more to the History palette than undoing recent actions

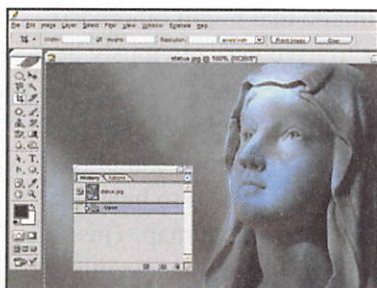
If you look at the foot of the History palette, you'll notice a series of thumbnail shortcut icons. Clicking on the Trashcan deletes the current image state, while the icon to the left creates a new document from the current state; this can prove useful if you want to carry out some experimental work without losing your current image. However, it's the central camera icon that's the key feature of the History palette. This is the icon that you click to create a snapshot of your image, which will then be stored at the head of the History palette, ready for use in combination with the History Brush.



The shortcut icons at the foot of the History palette include the option to save a snapshot of your image

Using the History Brush

Things will become much clearer when you starting working with this clever tool

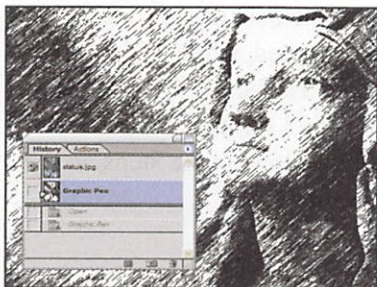


- 1 Open statue.jpg, which is a regular photographic image. Before you make any changes take a look at the History palette. This will show the only action so far applied to the image – the Open command. Above it is another state, which contains a thumbnail of the image plus the filename; this is an initial history snapshot, which is created by default whenever an image is opened.



Statue.jpg

Use the statue.jpg image on the CD to work through the following steps as we familiarise ourselves with the History Brush.



- 2 Select Filter > Sketch > Graphic Pen to apply that filter to the image and you'll see how the History palette updates. Now go to the foot of the palette and click the camera icon; you'll see that this creates a new snapshot at the top of the palette. Double-click on the entry and rename it 'Graphic Pen'; then click back on the 'Open' entry to revert the image to its original state.

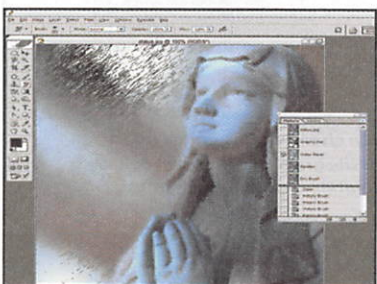


- 3 Repeat the process a few times, using contrasting filters. Be sure to save and name the snapshot each time, and to revert to the original image before creating a new snapshot. Once you've created a number of snapshots, return to the original image by clicking on the 'Open' entry. The palette should now contain your original image state, plus a number of different snapshots.



Advanced blending

With its blending mode left at Normal, the History Brush will sequentially paint over any previously visible effects. Changing the blending mode will go some way towards blending together your filter effects, and producing some interesting results.



- 4 We can now paint back areas of the various filter snapshots. Select the History Brush from the toolbar and click to the left of one of the History snapshots, so that the History Brush icon is visible in the left-hand column. You can change the brush's dynamics as normal before painting back selected detail. Continue by selecting other snapshots, and see what effects you get.

Displacement maps

Enhance the texture of a filtered effect by using another Photoshop file as an influence



Shades of grey

Displacement maps are initially easier to understand if you experiment with greyscale – or even black and white – images, as the technique uses these tonal extremes to calculate the displacement. You can use colour images, but this makes the calculation more complex, so keep things simple until you've grasped the concept fully.

Some of Photoshop's filters have a purpose that's not immediately apparent, and the Displace filter, found under the Distort submenu, is one of them. The tool works by using pixel data in an image to create a displacement map, which in turn determines how a particular image or selection will be distorted. It also has more creative uses; for example, you could choose to wrap a texture around a shape. For our purposes however, displacement maps can be very effective for adding some random texture detail

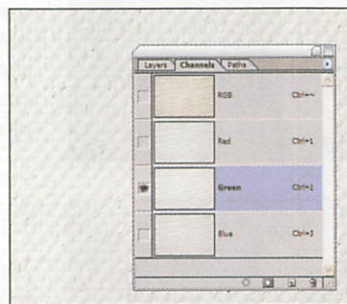
to an image that might otherwise appear to have very obviously been rendered using filters.

When the chosen filter is applied you'll be asked to locate another Photoshop file (PSD) to be used for the displacement map. This is then applied to the image, with the extreme black and white points used to determine how the original image will be adjusted, while mid-range greys won't affect the image. You can get a feel for how the process works by following the steps on the opposite page.

CREATING A DISPLACEMENT MAP

You can't use just any image to produce a displacement effect

When you run the Displace filter you'll be presented with a dialog in which you can select various options that control how the map image will affect your work, followed by a dialog that asks you to locate a suitable Photoshop file. You could simply resave an image such as a JPG or TIF in the .PSD format, but you'll get the best results if you convert the image to greyscale first, as this will help to create a more reliable displacement. An even more effective method of capturing the extreme greyscale information is to copy and paste the content of an image's green channel into a new document, and save this as the displacement map.



The green channel of an image often contains the greatest contrast in colour when creating a displacement map

Applying displacement maps

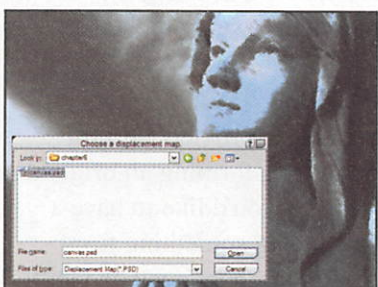
Rough-up your image textures to get away from the clinical finish of filter conversions



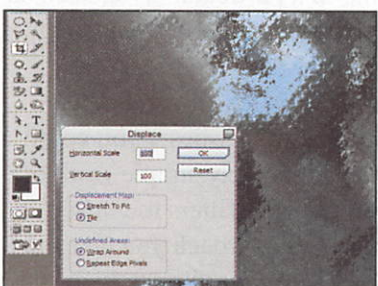
1 Open the statue_smudge.jpg image for a filtered version of an image we used previously. The filter that's been applied is the Smudge Stick; this has created a reasonable conversion, although the resulting finish is a little too perfect, which gives away the fact that a filter has been used.



2 Go to Filter > Distort > Displace to run the filter, and you'll be presented with its dialog settings. The Horizontal and Vertical scale settings will determine how far the displacement map will shift original content, so keep both these values low, at around 10. The remaining options can be left at their default settings.



3 OK the settings and you'll then be presented with a system dialog, prompting you to locate a PSD file on which the displacement will be based. Select the canvas.psd file from the CD, which contains the greyscale texture of a material canvas, and click open; you'll see how the perfect texture is shifted somewhat, to create a more hand-drawn finish.



4 Different images used for the displacement map will naturally affect an image in different ways, but for our purposes, almost any consistent texture will help to break up a too-perfect finish. Just remember to keep the Horizontal and Vertical scales low, otherwise you'll get some curious effects, which may not suit your purposes.



Statue_smudge.jpg / canvas.psd

Use the statue image to see how displacement maps work over the following steps, and the canvas.psd file for the image that will control the displaced effect.



3D mapping

Selecting Wrap Around under the Undefined Areas option in the Displace filter's dialog settings can help to create the appearance of three-dimensional objects. This becomes much clearer if you use a simple image, such as a black square set against a white background, as the displacement map.

Chapter 7

EMULATING PAINTING TECHNIQUES

In this chapter...

- ☐ Create realistic watercolour effects
- ☐ Emulate acrylics with the Paint Daubs filter
- ☐ Dabble with dry brush effects
- ☐ Adapt the Fresco filter to create textures
- ☐ Add realistic brush strokes to your work

Creating your first 'painted' image can be a daunting proposition, but with a little help from Photoshop's filters you'll soon be well on your way to becoming an Old Master

Painting is arguably the natural media technique that can be emulated most effectively in Photoshop. With the various paint media offering a broad range of colours and textures, a photograph can be quickly be converted into an image that's highly stylised, while still being instantly recognisable.

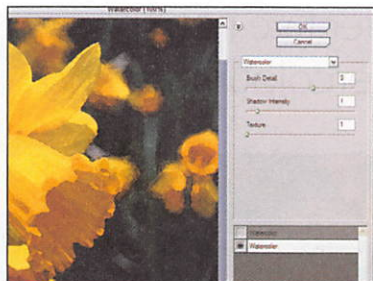
If you simply want to convert a photograph to give it the appearance of a painting, then the easiest way of doing this – as we've seen – is by using one of Photoshop's many filters. Using this method you can apply an effective base conversion to the image to get the appropriate look before touching things up, if

necessary, by hand, using the various brush tools that we've looked at.

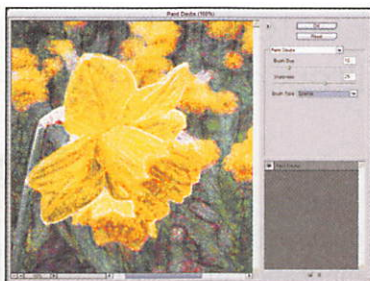
Original art

Filters can also provide a useful method of transforming an original work of art if you'd like to have a go at producing something from scratch. Rather than create the entire painting in a particular style, such as a watercolour – which, even using Photoshop would require a fair degree of artistic skill, and much configuring of brushes – you could produce a relatively simple work of art, before using filters to convert it.

Whichever approach you take, and whatever look you ultimately want



Page 72 Produce watercolours without having to cover the table with newspaper



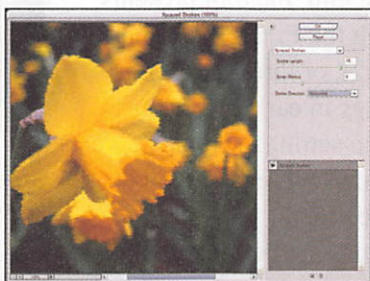
Page 74 Push the boundaries of the existing filters to get more creative results



Page 75 Create oil and acrylic effects using dry brushes, for a different finish



Page 77 Paint textures are one thing, but what about the brush texture?



Page 78 An airbrush can produce more than graffiti when we use the Spatter filter



Page 79 Blend paint effects and textures without losing colour or detail

to achieve, Photoshop will have a filter for the job. Although many of the filters that you'll typically use to emulate natural media are logically found under the Filter > Artistic menu, there are plenty of others tucked away under less obvious submenus that are worth experimenting with.

Mix and match

There are a few things that you need to bear in mind when you're emulating paint, such as what kinds of paints can be used together, and the types of canvases to which they'll be typically applied. Refer back to Chapter 3 to refresh your

memory, but, for example, it can be taken as read that you should avoid mixing oils and watercolours.

In this chapter we'll be looking specifically at the different filters that Photoshop provides for the emulation of paint media, and offering some tips and advice on how you might choose to mix and match them, so that you can avoid the generic look that can often be imposed on an image by these one-click conversion tools. By understanding the various filters' settings you'll be better able to adapt their default configurations, so that you can get the most convincing results possible.

The Watercolor filter

One of Photoshop's most effective natural media filters emulates a watercolour painting



Make an impression

You can make adjustments to the Watercolor filter's settings to vary the texture and finish of your images, but for a quick effect try applying the filter twice in succession (or creating two duplicate layers in the CS Filter Gallery) to create more extreme results reminiscent of the late Impressionists.

The Watercolor filter produces one of the most realistic conversions that can be achieved through the application of a single filter. Found under the Filter > Artistic submenu, the tool presents itself through the Filter Gallery in Photoshop CS, or through similar dialog settings in earlier versions. Adjusting the settings, which we've outlined below, will enable you to fine-tune the effect.

Some images are better suited to a watercolour conversion than others. Overly bright, dark or contrasty



The preview window provides a clearer view of the effect your chosen filter will have when viewed at 100% magnification

images will tend to lose impact, so stick with images that have a relatively close palette of colours.



Blur into a wash

If your original image's composition proves to be too 'busy' when converted into a watercolour, you could try emulating focal length within the image, to blur background detail. Such detail can then be converted to create a colour wash effect, which will draw attention to the foreground subject.

WATERCOLOR FILTER SETTINGS

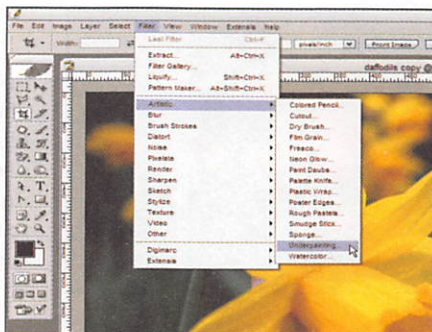
- **THE BRUSH DETAIL SLIDER** will exaggerate such detail. At a lower setting, images will appear as though they've been painted using the dry-on-dry technique, with clearer, defined edges. A higher setting softens the effect, creating the impression of water being used.
- **THE SHADOW INTENSITY** setting can be likened to an image's contrast settings, with higher values creating darker results and lower values brightening the image. This setting can be useful for compensating for any washed-out appearance your image may take on, depending on the Texture and Brush Detail settings.
- **THE TEXTURE OPTION**, as its name implies, determines the amount of canvas and paint texture the filter applies to the conversion. Balance this out with the Brush Detail, and you'll find that a whole range of watercolour finishes are possible.

The Underpainting filter

Compliment the effect of other artistic filters by enhancing an image's canvas texture

While the Watercolor filter can produce some very effective conversions, it has a slight weakness in that it tends to understate the canvas texture in your artwork. The Underpainting filter, on the other hand, has something of an opposite effect, produce realistic textures that compliment the Watercolor and other artistic filters.

The Underpainting filter's options afford you considerable control over the canvas texture, enabling you to vary the scaling and relief, among other things. The filter first places



Many of the more creative filters, including the Underpainting filter, can be found under the Filter > Artistic submenu

the image on a textured background, then superimposes the image over that background image.



Enhancing watercolours

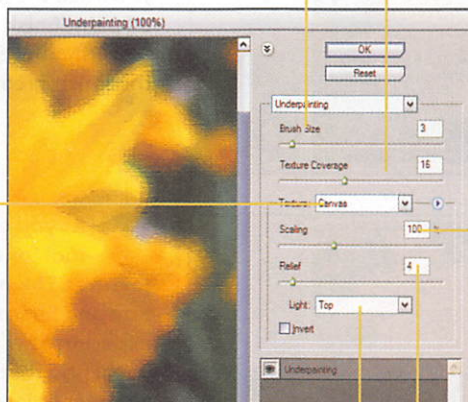
The Underpainting filter enhances an image to which the Watercolor filter has been applied by giving it a more pronounced canvas texture. Just remember to apply the Watercolor filter first, otherwise you'll lose the generated texture.

UNDERPAINTING CONTROLS

The Brush Size setting affects the amount of detail that's retained; smaller brush sizes will produce results more faithful to the original image.

The Texture option controls how the texture of the canvas is rendered. You can choose from a number of default base textures, or click on the menu icon to load custom textures.

The lighting direction will be more pronounced the higher the Relief setting, while the Invert option reverses the surface's light and dark colours.



A higher Texture Coverage setting gives the appearance of thicker paint being applied over more solid background colours, so that less canvas detail shows through.

The Scaling slider alters the perceived size of the canvas. At a higher setting, for example, you'll get a more pronounced texture.

The Relief settings determine how rough or smooth your chosen texture will appear, and can dramatically alter your image's appearance.

The Paint Daubs filter

All manner of effects can be created using this versatile filter, from oils through to pastels



Daffodil.jpg

You can use one of your own images to experiment with the Paint Daubs filter, or use the daffodil.jpg image from the CD to follow the walkthrough steps.



1 Open an image which contains some contrasting detail; the daffodil.jpg image on the CD has a pronounced depth of field effect. Select Paint Daubs from the Artistic filters submenu. Set Brush Size to around 10 pixels, and drag the Sharpness slider to the right to set a high value. With Brush Type set to Simple, you'll find the filter creates an effect suggestive of an oil or acrylic paint finish.



2 If you drag the Sharpness slider slowly to the left to reduce the setting, you'll notice that the preview updates to display a finish more suggestive of a watercolour painting. The increased blurring results in a softer finish, which emulates the blending of the watercolours.

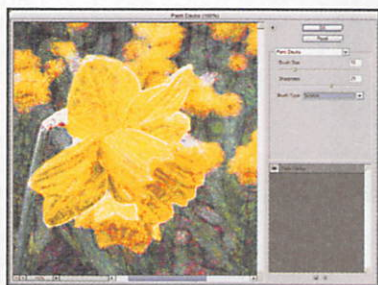


A bigger preview

If you find that the Filter Gallery doesn't give you a big enough preview, you can hide the central window, which displays the various filter thumbnails, by clicking on the arrowhead to the left of the OK button. You can still access the various filters using the drop-down list at the head of the filter settings window.



3 Next, leaving the Brush Size at 10, increase the Sharpness to 30. Then change the Brush Type to Wide Blurry, and you'll see the image transform from a regular oil paint finish to a more oil pastel effect. Lowering the Sharpness setting will soften the finish, creating a more chalky effect.



4 As you can see, the filter is a versatile tool for emulating a range of media textures. The primary controls for the Brush Size and Sharpness are fairly intuitive, but also experiment with the different Brush Types; you'll find that you can get some interesting abstract finishes, from aged film using the Dark Rough brush to a bleached print look with the Sparkle option.

The Dry Brush filter

Another versatile filter, which can produce effective results in the style of most paint media

The Dry Brush filter, as its name implies, paints the edges of an image using a dry brush technique that can emulate both watercolour and oil finishes. The filter simplifies an image by reducing its range of colours to give the appearance of an indexed colour mode conversion (see Further information tip, right), while retaining a brushed finish.

As with the Paint Daubs filter, the key is to balance the settings for the available Brush Size, Brush Detail and Texture sliders. With a little experimentation you'll soon



With simple control over a brush's size and detail settings and its texture, the Dry Brush creates some incredibly diverse results

discover some of the different styles possible; the tips below should help you to get started.



Inverted settings

As the filter simplifies the bitmap content, applying the Dry Brush filter twice to an image with inverted settings will result in a highly stylised and illustrative finish. This can be previewed using the Filter Gallery in Photoshop CS.

EMULATING DIFFERENT PAINTING STYLES

- **SOME FINE OIL** or acrylic results can be achieved using small Brush Size and high Brush Detail settings, combined with a medium Texture setting.
- **FOR A ROUGHER FINISH** more suggestive of hastily applied acrylics, try reversing the Brush Size and Brush Detail sliders; you'll find your image acquires a more 'rushed' appearance, with less detail and bolder strokes that could have been applied using a palette knife.
- **LEAVING THE BRUSH** settings at their defaults, see how much you can change the appearance of an image by adjusting the Texture setting. A higher setting creates a rougher appearance, while reducing the value creates more of a watercolour finish.
- **WITH THE BRUSH SIZE** set small, and Brush Detail and Texture at higher settings, a more impressionist watercolour effect is created, with some interesting variation between foreground and background detail.



Indexed colour

Converting an image to indexed colour mode reduces the number of colours in the image to a specified amount. The highest number that can be configured is 256, although reducing an image to 8, 16 or 32 colours can produce some instant illustrative results, depending on the image's complexity.

The Fresco filter



Van Gogh

Combining the texture of the Fresco filter with the Paint Daubs filter can provide the kind of bold results reminiscent of the style of Vincent van Gogh. Experiment with the daffodil.jpg file on the CD, and you'll be able to create your own take on van Gogh's Sunflowers.

It may be an outdated method of painting, but creating a fresco needn't drive you up the wall

Fresco is a method of painting on plaster that dates back to Roman times, when the technique was used to decorate palaces and the homes of the wealthy. There were two main styles: dry fresco, or fresco secco, and wet, or true fresco. The latter method involved pigments being applied to thin layers of wet plaster, so that they became absorbed into the wall covering.

To fully appreciate how best to emulate the medium you should look towards some real-life examples. One of the most famous frescos is

Leonardo da Vinci's The Last Supper, which can be found at the Convent of Santa Maria delle Grazie in Milan. However, this is neither a true fresco or fresco secco, but was created using a technique da Vinci developed himself.

Fresco is a very delicate medium, and many examples have succumbed to the ravages of time (The Last Supper has deteriorated particularly badly). If you do choose to emulate this style, you may want to consider ageing your converted image for a touch of authenticity.

FRESCO EFFECTS

We can use the filter to emulate more common media styles

Emulating freshly painted plaster may not be high on your agenda, but if you use the filter in a more inventive way, you'll find it provides some unique methods for creating traditional painted finishes. The Brush Size and Detail sliders work in a similar way to those for the Paint Daubs and Dry Brush filters, but it's the Texture slider that's primarily responsible for creating the filter's effect. As a real fresco would have been painted on to plaster, the texture mapped on to the effect is a little rougher and more random than that of the average canvas, making this the ideal choice for any image that would benefit from such a finish.



The Fresco filter offers an alternative approach to creating more abstract painterly effects

The Brush Strokes filter

There's more to paint effects than emulating texture, and these filters help to finish the job

While the Artistic filters provide a range of painterly effects, the various options under the Filter > Brush Strokes submenu help to compliment those effects with a range of features that concentrate more on the texture and finish of the paint. Whether you're intending to influence grain, texture, noise or edge detail, you'll be sure to find the appropriate tool from among the options available.

We've outlined the main characteristics of the different Brush Strokes filters below, and on the



If you're running Photoshop CS, you can get an idea of the different brush strokes available by viewing their thumbnails in the Filter Gallery

following page we'll take a closer look at two of the more unusual ones, Spatter and Sprayed Strokes.



Suggesting texture

Don't forget to make use of blending modes to suggest texture in your images. Rather than apply two filters to the same layer, you could choose to duplicate the layer, and apply various blending modes to the duplicate to influence the base layer.

DIFFERENT STROKES

- **THE CROSSHATCH** and Angled Strokes filters add texture while preserving image detail. The former produces a finish closer to that created by a pencil, while the latter contrasts light and dark regions of an image, with strokes being applied in opposing directions.
- **THE SPATTER** and Sprayed Strokes create a more random finish. They emulate the finish associated with an airbrush, with the Sprayed Strokes option mimicking the hand movement of the artist.
- **ACCENTED EDGES** and Ink Outlines emphasise the outer edges of an object. The former can create edge effects ranging from white chalk to black ink, while the latter creates a fine-lined pen-and-ink-style drawing.
- **THE DARK STROKES** and Sumi-e filters enhance an image's contrast with bold strokes, which add intensity to the image by pushing darker colours nearer to black, and exaggerating brighter regions.



Sumi-e

Sumi-e is a form of Japanese ink painting that evolved out of Japanese calligraphy. The name literally means 'charcoal drawing', although it has become synonymous with the application of black inks using a bold natural hair brush.

The Spatter filter

Use Photoshop's airbrush-style filters to create some more unusual effects



Stippling

Stippling is a method of painting or drawing using a series of dots, rather than lines. In addition to using a spatter-tipped airbrush, the effect can be achieved with a stipple brush that has broadly distributed bristles of the same length; such a brush might be used to create simulated textures within a painting, such as granite or sandstone.

Two of the more unusual filters found under the Filter > Brush Strokes submenu are those that mimic airbrush behaviours. The Spatter filter replicates the effect of an airbrush fitted with a spatter tip which, in the real world, is used for creating stippled effects. The grainy results this tip produces are achieved by running an irregular flow of paint through an airbrush using reduced air pressure. When emulating artwork you may want to apply such an effect in context, and make use of the Spatter filter for creating the

kind of natural textures that you might get by using a real airbrush on a canvas.

Alternatively, with a little configuration, the same filter can be employed to emulate the look of a Pointillist artwork. Pointillism is a method of painting that was developed in France in the 1880s, in which tiny dots of colour are applied to the canvas. Using the Spatter filter on a high radius setting in combination with a low smoothness setting will create the basis for such an effect.

SPRAYED STROKES FILTER

You can create more than just graffiti with this airbrush-style filter

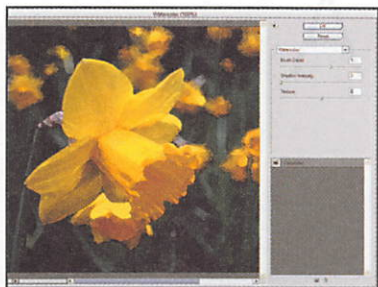
Just as the Spatter filter can be adapted to create alternative effects, so too can the Sprayed Strokes filter. This particular filter is more readily identifiable as an airbrush conversion than the Spatter variant, because it mimics the movement of an artist's stroke. You'll find this helpful if you want to paint graffiti tags, but by adjusting the Stroke Length and Radius settings, and changing the Stroke Direction, you can adapt the filter to create more traditional painted finishes, ranging from coloured pencil strokes to more abstract watercolour effects, and even the kind of seemingly random effects reminiscent of modern artists such as Jackson Pollock.



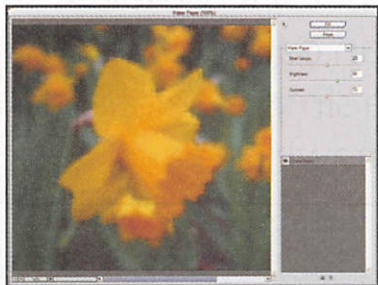
Exaggerating the Spray Length and reducing the Radius produces some interesting coloured pencil textures

Applying textures

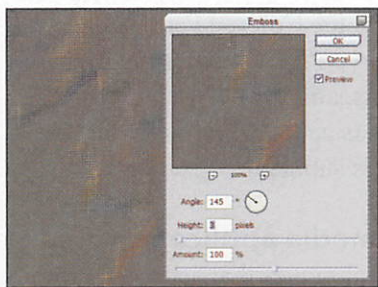
Apply a texture to a converted image without losing any of the original detail



- 1 Open the daffodil.jpg from the CD and duplicate the original layer before choosing **Filter > Artistic > Watercolor**. Adjust the filter's settings to convert the original background layer into a watercolour. We used a **Brush Detail** setting of 9, **Shadow Intensity** of 0 and **Texture** of 2. OK the settings.



- 2 To add a basic texture to our image we're going to use the **Water Paper** filter. However, if we were to apply such an effect using the **Filter > Sketch > Water Paper** option, we would find that the detail of the original watercolour conversion would be lost. Instead, apply the **Water Paper** filter to the duplicate layer, using mid-range settings for the available options, before clicking OK.



- 3 At this point we could try to impose our **Water Paper** texture on the watercolour layer using blending modes, but the similar colours would have unwanted effects on each other. Instead, emboss the upper **Water Paper** layer using the **Filter > Stylize > Emboss** option, with **Angle** set to 145, **Height** set to 3 pixels and **Amount** set to 100%, to convert our image into one we can use as a greyscale bump map.



- 4 If you now change the blending mode of the embossed **Water Paper** layer to **Overlay**, you'll see instantly how the texture is inherited by the base watercolour layer, without affecting its colour or detail levels.



Daffodil.jpg

You can make use of the daffodil.jpg image that we used previously to follow these steps, but remember to revert to the original version. Alternatively, you can use your own image.



How does it work?

If you applied the **Overlay** blending mode to the upper **Water Paper** textured layer before embossing it, you'll have noticed strong changes in the colour balance. By embossing the image we exaggerated the edge detail, and converted the majority of the image to a neutral grey. Midtone greys such as this are ultimately disregarded by the **Overlay** blending mode, leaving only the highlights and shadows of the canvas texture to influence the base layer.

Chapter 8

EMULATING DRY MEDIA EFFECTS

In this chapter...

- ☐ Create realistic pencil strokes
- ☐ Make a mess with the Smudge Stick filter
- ☐ Emulate chalk, charcoal and crayons
- ☐ Produce realistic pen and ink drawings
- ☐ Adapt the Ink Outlines filter to create a painted ink effect

Photoshop provides all you need to emulate dry media, with filters that can convert your images into anything from a simple pencil sketch to a coloured chalk drawing

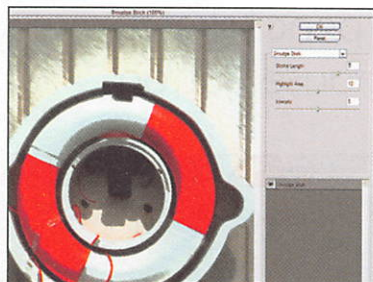
Photoshop has an array of filters and other tools that enable us to convert our images into any of the varied styles that come under the general heading of dry media. In the previous chapter, we saw how we could modify the existing paint and brush-based filters to add some individual touches to our conversions, and prevent them from looking too artificial; we can do the same thing with filters that emulate dry media.

Most of the filters that we'll be looking at in this chapter can be found under the Filter > Sketch submenu, but there are a few interesting ones that are tucked

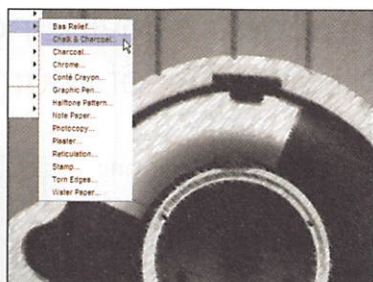
away elsewhere in the menus, such as the Colored Pencil filter, which you'll find under the Artistic options, and the Crosshatch filter, which is accessed through the Brush Strokes submenu.

Dry media application

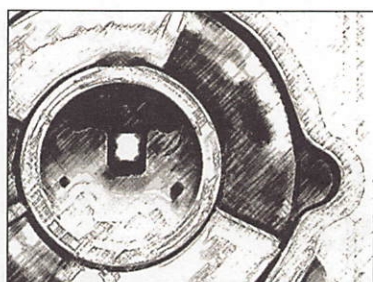
The techniques that artists use for applying dry media are very different to those used when working with paint, and these differences will be reflected in our digital artwork. Dry media are predominantly applied directly by hand, which gives the artist a different measure of control compared to a painter working with brushes. The amount



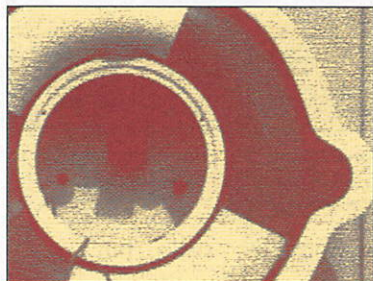
Page 83 Create range of effects with the versatile Smudge Stick filter



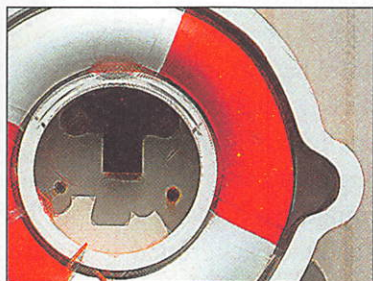
Page 84 Chalks and charcoals are among the most popular dry media



Page 85 Simplify the process, and the results, by working with Charcoal alone



Page 86 Learn about Conté crayons so that you can emulate them effectively



Page 87 Modify the Crosshatch filter to produce both pencil and acrylic finishes



Page 89 Create perfect pastels that adapt their dynamics to suit the canvas

of detail in an image depends very much on the media used; a pencil can be sharpened to a fine point to create incredibly fine detail, while chalks, charcoals and crayons tend to be much blunter, and rely on blending, shadows and highlights to emphasise colour and form.

Bear in mind that when dry media are applied, they adhere to the canvas by becoming ingrained in its texture, rather than by drying and setting; they remain malleable until a fixer is applied to seal the artwork. Because of these characteristics, the texture of both the medium and the canvas becomes an important factor when we're trying to create realistic

dry media effects in Photoshop. Although some filters will generate suitable textures, we'll once again be turning to blending modes to enhance our basic conversions.

Mixing media

Dry media also allow us a little more flexibility when it comes to mixing our media; because we don't have to wait for them to dry, we can work with them more freely than we can with paints. We can also use certain dry media tools – such as pastels and soft pencils – to enhance a painting. If we were creating a physical work of art we would have to wait for the paint to dry before doing this.

The Colored Pencil filter

Give an image a convincing pencil sketch look with one click of your mouse button



Drawing left-handed

The Colored Pencil filter doesn't allow you to determine the angle at which the pencil strokes are applied, so your work will always look as though it has been created by a right-handed artist. If you're left-handed, and want your artwork to look realistic, flip the image horizontally before applying the filter, and flip it back afterwards.

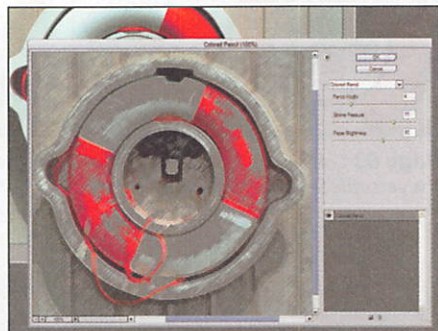


The right key

Key is a term more commonly used in photographic circles to describe an image that errs towards the extreme exposure settings. A low key image is darker, and underexposed, while a high key image will tend towards overexposure, giving an image a more bleached and washed-out appearance.

The Colored Pencil filter is one of the dry media filters found under the Artistic menu. Configuring the filter is simple; there are options for Pencil Width, Stroke Pressure and Paper Brightness.

The filter works by rendering an image on a solid background, the colour of which is determined by the current background colour in the toolbar. Strong edges are retained, and given a rough crosshatch appearance, and the background colour shows through any smoother areas. The options outlined below



The Colored Pencil filter is one of the most intuitive filters to configure, thanks to its straightforward options

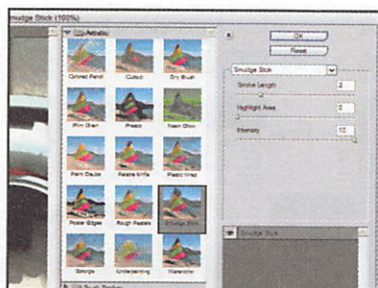
are fairly straightforward, but with a little experimentation some interesting effects can be achieved.

SHARPEN YOUR PENCIL

- ☐ **THE MOST** authentic results are achieved using a low-to-medium Pencil Width, with the Stroke Pressure and Paper Brightness set around their midpoints; raising the latter options slightly creates a more pronounced effect, which you may prefer.
- ☐ **INCREASING THE** Pencil Width, and pushing the Stroke Pressure towards its upper range, can achieve a more pastel-like effect. Naturally, moving the Paper Brightness settings away from the centre will result in an image with a low or high key effect (see tip, left).
- ☐ **YOU CAN** even use the filter to emulate a traditional blackboard effect, by raising the Pencil Width and Stroke Pressure settings to their highest settings and taking the Paper Brightness slider right down to 0.
- ☐ **FEEL FREE** to experiment with the settings; it's a good idea to work on an image that's fairly simple while you get a feel for the tool.

The Smudge Stick filter

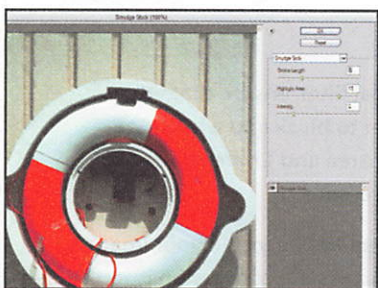
This filter creates a softer version of the effects that you get from the Colored Pencil filter



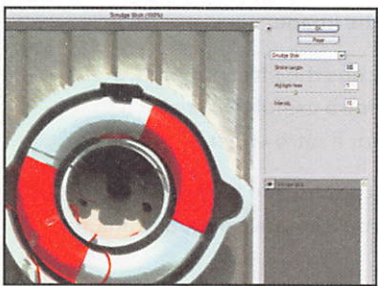
1 Open the lifebuoy.jpg image from the CD or use an image of your own; a simple image will help you to see the effects of different settings for the filter. Go to **Filter > Artistic > Smudge Stick**; you'll see that the tool's settings comprise three sliders: **Stroke Length**, **Highlight Area** and **Intensity**.



2 The filter works by softening an image using short diagonal strokes to smudge or smear the darker areas of the image, while lighter areas become brighter and lose detail. Start off with the **Highlight Area** and **Intensity** sliders at medium settings, and notice how adjusting the **Stroke Length** exaggerates or reduces the filter's effect.



3 If the effect proves too harsh you could balance things out a little by increasing the **Highlight Area**, and reducing the **Intensity**. A low-to-medium **Stroke Length** will retain some detail, creating a pastel-like effect.



4 You could also choose to exaggerate the effect by combining a high **Intensity** value with a low-to-medium **Highlight Area** setting. With the **Stroke length** at its lowest setting the results begin to emulate an old photograph, while the highest setting creates the impression of an oil pastel image.



Lifebuoy.jpg

Many of the filters covered in this chapter are best appreciated when applied to a relatively simple image, such as the lifebuoy.jpg photo on the cover disc.



Extreme contrast

The **Smudge Stick** filter does a surprisingly good job of boosting the contrast of images comprised predominantly of midtone colours, such as old, faded black and white photographs. Using a high **Intensity** setting and a low **Stroke Length** you'll be able to raise the contrast, while retaining a relatively high level of detail.

The Chalk & Charcoal filter

Make a digital mess with the roughly applied chalk and charcoal dry media filter



Other colours

For the most realistic results keep the foreground and background colours set to black and white. However, you can get some interesting and unusual effects by experimenting with these colours.

The Chalk & Charcoal filter, found under the Filter > Sketch submenu, redraws an image's highlights and midtones in a solid midtone grey with a coarse chalk finish, while shadows are replaced with black diagonal charcoal lines. The charcoal is then drawn in the foreground colour, and the chalk in the background colour.

The filter is controlled through sliders that enable you to choose the amount of chalk or charcoal to be used, and the stroke pressure used to apply it. Increasing the Chalk



The Chalk & Charcoal filter can be found with many of the other dry media filters under the Sketch submenu of the main Filter menu

Area creates a lighter image, while increasing the Charcoal Area makes things darker.



Extra smudging

Chalks and charcoals are frequently softened by smudging the media on the canvas with the finger. You can simulate the effect using the Smudge Tool; check the Finger Painting option for a more convincing effect.

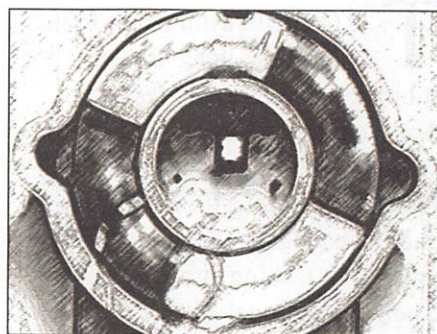
CONTROLLING THE FILTER

- ☐ **BEFORE RUNNING** the Chalk and Charcoal filter, ensure that your foreground and background colours are set to black and white. For the most natural-looking results, set Chalk Area and Charcoal Area to mid-range values, and reduce the Stroke Pressure.
- ☐ **TOO HIGH** a Stroke Pressure can cause detail to be lost in your image's black and white extremes. The secret to a successful conversion is to reduce this setting and raise the Charcoal and Chalk area settings to enhance the lighter and darker regions of the image.
- ☐ **WITH THE KIND** of greyscale midtone results the filter provides, a processed image on its own layer can provide a useful texture for a blending mode. Try the Vivid Light option for a retro effect.
- ☐ **FOR AN UNUSUAL** effect switch the foreground and background colours. With these set to white and black you'll create a negative image.

The Charcoal filter

Create a cleaner-looking image by losing the chalk, and applying charcoal on its own

Like the Chalk & Charcoal filter, the plain Charcoal variant redraws an image with a smudged effect reminiscent of real charcoal, but the results are a little more posterised. Major edges are roughly drawn, while midtones are sketched using a diagonal stroke that simulates the artist's hand movement. The charcoal effect is used to create the foreground detail, while the plain paper provides the background and highlights. The settings are self-explanatory, although with a little modification you can produce



The charcoal filter creates a cleaner finish, as the white paper texture shows through to produce an image's highlights

results that are very different from the default finish, and create watercolour or pen and ink effects.



From charcoal to ink

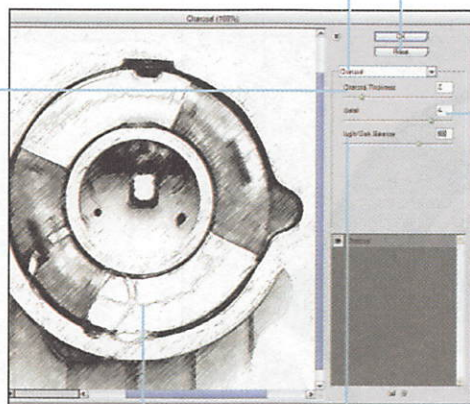
Combining a high Charcoal Thickness setting with a medium-to-high Detail setting and a low-to-medium Light/Dark Balance setting washes out detail, producing a watery ink effect rather like a reduced Sumi-e filter effect.

CHECKING OUT CHARCOALS

If you're running CS the filter can be accessed through the Filter Gallery using this menu, which provides quick access to all the available filters.

The Charcoal Thickness slider is used to determine how sharp or blunt your virtual stick of charcoal is, and works in conjunction with the Detail options.

The preview window is available in both Photoshop CS and earlier versions. View this at 100% for the most faithful indication of your conversion.



Hold down the [Alt] key and you'll find that the Cancel button changes to a Reset option, enabling you to return the filter settings to their default values.

The Detail option dictates how detailed the converted image will be relative to the original image. At a high setting more edge detail will be recognised by the filter.

The Light/Dark Balance provides some basic contrast control. A darker bias creates the impression that the charcoal has been applied using more pressure.

The Conté Crayon filter

Render the effect of the Conté crayon and generate a realistic texture at the same time

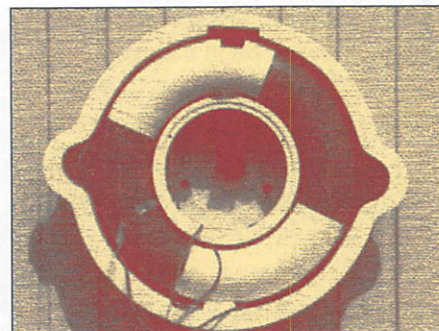


Colourful crayons

Although sepia tones are the traditional option for the Conté crayon, it now comes in a variety of colours. Changing your foreground and background colours can produce some interesting effects.

The Conté Crayon filter, found under the Filter > Sketch submenu, emulates the texture of dense dark and pure white Conté crayons. The filter uses the foreground colour for dark areas and the background colour for light areas, in a fashion similar to the Chalk & Charcoal filter.

Modern Conté crayons are made of a variety of fabricated chalks, and are now available in various colours. Originally, however, they came in red-brown sanguine and dark brown (bistre) variants, as well as the more



Using sepia tones produces a more authentic Conté crayon effect. This is achieved by adjusting the colour swatch accordingly

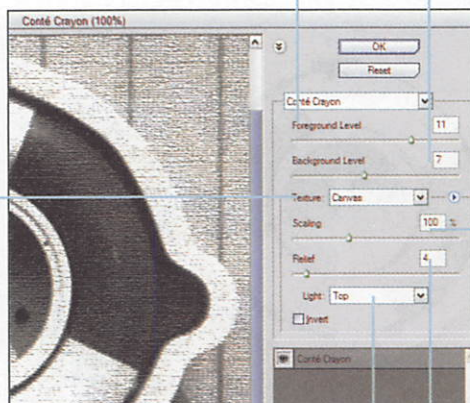
common black, white and greys, so you might like to change your colours to similar tones.

CONTÉ CRAYON FILTER SETTINGS

Raising the Foreground Level increases the intensity of the effect applied, while reducing it produces a less saturated finish.

The filter is one of the few that enables you to select a texture for the effect. You can choose from the defaults, or load other textures by clicking on the arrowhead.

The direction of the lighting can make a substantial difference to the appearance of the image, depending on the Canvas Texture and Relief settings.



The Background Level setting works in a similar manner its Foreground Level counterpart.

The Scaling control relates to the chosen texture. A high value gives a larger texture, creating the appearance of a smaller picture.

The Relief slider determines how much texture your chosen canvas has. A higher setting creates a rougher texture, a lower setting a smoother texture.

The Crosshatch filter

This versatile brush-related filter can be configured to emulate pencil and pen effects

The Crosshatch filter is a good example of a filter that can be easily adapted to mimic a wide range of results. Found under the Filter > Brush Strokes menu, the filter preserves the detail of an image, while adding texture and roughening the edges of any coloured areas.

With mid-range settings specified, the filter creates the appearance of paint having been applied using a fine brush, although these settings can easily be modified to produce a mixed media look, with solid



The Crosshatch filter can be configured to produce mixed media conversions, such as this paint and pencil effect

colours appearing painted, while detail is added through more precise pencil or pen lines.



Emulating the pencil

To create a more defined coloured pencil effect, use a low-to-medium setting for the Stroke Length and Sharpness controls combined with a medium Strength setting. Reducing the Stroke Length and increasing the Sharpness somewhat will help to exaggerate the effect.



Simple acrylics

Try reducing the Strength to its minimum setting, increasing the Stroke Length to a medium-to-high setting and dropping the Sharpness slider to around a third of its range. This should soften the image and posterise the colour tones, to create a flattened acrylic texture.

CROSSHATCH CONTROLS

- ☐ **THE STROKE LENGTH** slider determines the length of the crosshatching strokes. A shorter length will retain detail from the original image to emphasise texture, while a longer stroke will produce a softer, blended finish reminiscent of a posterised painting.
- ☐ **THE SHARPNESS** setting determines the clarity of the texture; at its extreme settings it creates the effect of the crosshatching being applied with either a very sharp or a blunt pencil. The lowest settings reduce the effect, creating a blurred finish, while a high setting will exaggerate the strokes to produce a scratched finish.
- ☐ **THE STRENGTH** settings are constrained to low, medium and high options, and are used to control the number of hatching passes. In conjunction with the Sharpness slider this can create effects ranging from a soft, blurred finish to a hard, scratched texture.

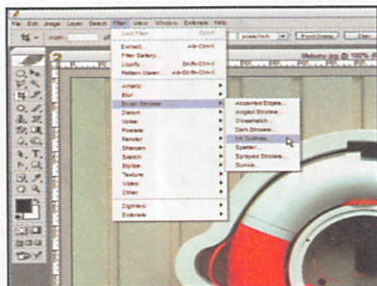
The Ink Outlines filter

Redraw an image with fine narrow lines over the original details in a pen-and-ink style



Lifebuoy.jpg

Use the *lifebuoy.jpg* image from the CD again to experiment with this filter. The clear outline around the life preserver gives a good indication of the filter's effect.



1 To make the best use of the Ink Outlines filter, we need an image that has clearly defined edges, such as our *lifebuoy.jpg* image. More complex images will only confuse the tool, and create messy results. With the image open, launch the filter from the **Filter > Brush Strokes** submenu.

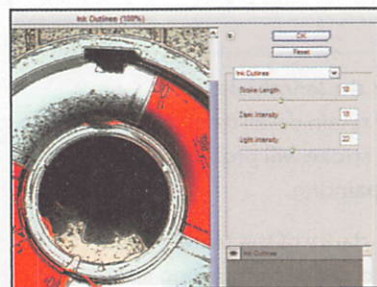


2 The Ink Outlines filter has three controls. **Stroke Length** is self-explanatory, with higher settings helping to smooth out the speckled appearance commonly found in flatter textures within an image. The **Dark** and **Light Intensity** sliders boost regions of the image that are dominated by shadows or highlights respectively.

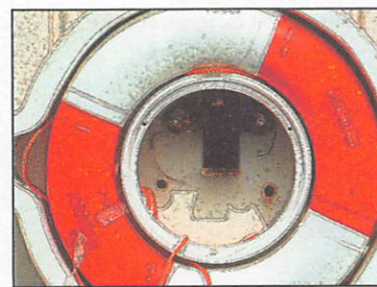


Choose the right image

When applied to a still life or landscape image the Ink Outlines filter can create the look of an old woodcut or metal engraving. However, if you try to apply it to a typical portrait shot you'll run into problems, with all kinds of blemishes emerging from the natural skin textures.



3 A good balance between a painted and an ink finish can be achieved with a **Stroke Length** of around 18. Combine this with a similar level of **Dark Intensity**, and raise the **Light Intensity** slightly to around 22. This should boost the brightness of the image, while keeping the outlines fresh and neat.



4 Alternatively, you could try a more extreme effect for an illustrative mixed media style. With the **Stroke Length** and **Dark Intensity** settings at their minimum, and the brightness of the image bleached out by a maximum **Light Intensity** setting, you'll find the image loses detail around flatter-coloured areas, while the strong outlines produce a well-defined stroke that looks hand-drawn.

The Rough Pastels filter

Soften your images with a pastel look, and choose your own texture while you're at it

The Rough Pastels filter is another dry media variant that's found among the Artistic filters, rather than being grouped with the Sketch options. When you launch it you'll notice a similarity to filters we've already explored, such as Conté Crayon and Underpainting, as its settings include the option to define a canvas texture in addition to the regular controls.

The filter gives an image the appearance of having been created with coloured pastel chalk. In areas of bright colour, the chalk appears

thick, with little texture, while darker areas give the impression that the chalk has been scraped off to reveal the canvas texture. The filter has controls for Stroke Length and Detail. A high Stroke Length setting creates the effect of the strokes having been applied in a casual manner, while a lower setting produces a conversion more faithful to the original image. Similarly, increasing the Stroke Detail creates a finer, more considered result, as more subtle light and shade details are preserved.



Other textures

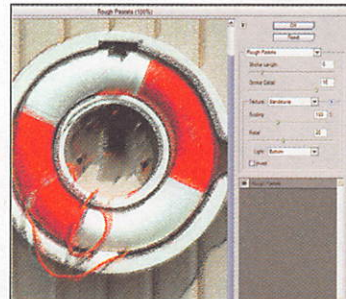
Filters such as Rough Pastels, Conté Crayon and Underpainting rely on a texture to create their effect.

The default options are Brick, Burlap, Canvas and Sandstone, but you can easily apply your own texture by using the Load Texture command, accessible via the arrowhead icon to the right of the Texture menu.

CREATE YOUR OWN TEXTURE

Default textures are effective, but they preclude further editing

The Rough Pastels filter provides a good range of options for creating a typical pastel drawing. However, once you've run an image through the filter it becomes difficult to make further changes to it, such as blending colours with the Smudge Tool, as the filter's texture will be lost. To get around this you might choose to apply the basic pastel effect to a smoother canvas, either by making the necessary settings within the Rough Pastels dialog itself or by using a related filter, such as the Conté Crayon. This will enable you to make changes before applying the canvas texture, either by applying the Texturizer filter or using adjustment layers.



The Sandstone texture is probably the most effective canvas texture available to the Rough Pastels filter

Chapter 9

EMULATING ALTERNATIVE ART STYLES

In this chapter...

- ☐ Create cutout effects
- ☐ Emulate the look of film grain
- ☐ Get abstract results with the palette knife
- ☐ Produce pen and ink drawings using the Graphic Pen filter
- ☐ Soften detail using airbrush techniques

When emulating natural media, you needn't restrict yourself to paints, inks and dry media. There's a wide variety of other methods that can be employed, and even combined

When we consider natural media we tend to think of the more traditional methods, which we've already covered in this Focus Guide: paints, pen and ink, and the dry media such as chalks, charcoals and crayons. However, there are other, less familiar media available to artists, and an increasing number are experimenting with these alternative methods.

There's no reason why you can't have a go at emulating some of these different styles in Photoshop; you may find that a particular technique is just right for converting one of your own images. Of course, a physical artist will tend to have a

good idea of the unwritten rules of their chosen media, but if you have a decent grasp of what can and can't be done then there's no reason why you shouldn't be able to produce realistic results.

Mixed media

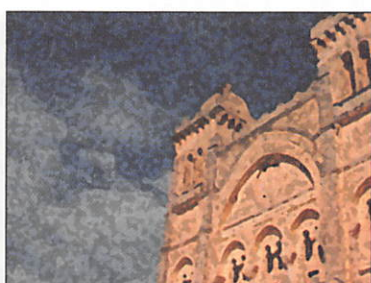
Such freeform methods of creating art have now become so common that they've been given their own label: mixed media. As the name suggests, these techniques involve combining two or more media in a single composition. Mixed media has been around for longer than many people realise, with some exponents of the artform making



Page 92 Create flattened, simplified vector-like results using the Cutout filter



Page 93 Introducing film grain can lend a sense of atmosphere to your images



Page 95 The Sponge filter provides a number of different textures



Page 97 Blend less detailed features, such as clouds, using airbrush effects



Page 98 The Photocopy filter provides a good base for creating original artwork



Page 99 Put your skills into practice by combining filters and blending modes

quite a name for themselves. The American Alexander Calder was one of the first artists to experiment with mixed media. One of his most famous works, Calder's Circus, dates from the late 1920s; it takes the artform to extremes, utilising all manner of materials, from paper and cardboard through to the more unusual, including bottle caps, pipe cleaners and buttons, to create a diorama that Calder brought to life by staging 'performances'.

Such elaborate mixed media creations go way beyond what you might realistically hope to produce within the two-dimensional confines of Photoshop, so it might be more

convincing if you consider creating a more simple collage-type effect that combines paints, inks or dry media with some of the more unusual effects that we'll be looking at over the following pages.

Keep it real

Bear in mind how different media interact with each other; if you know how mixing media might affect their dynamics, then you'll be on the way to creating something that's truly realistic. Only when you balance what's possible within the real world with what you can create in the virtual world will you be able to create truly believable results.

The Cutout filter



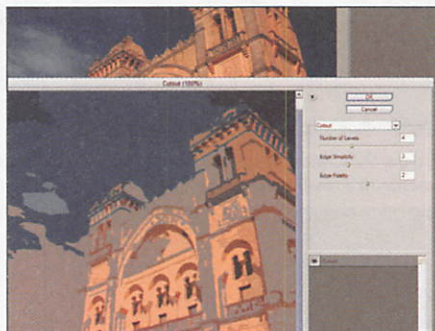
Contrasting cut-outs

You can get some interesting silhouette effects by applying the Cutout filter to images that contain high contrast. Black and white images produce the most simple results, while coloured images are built up from several layers of coloured paper.

Simplify colours and shapes to create images that appear to have been cut out of paper

Cut-out techniques have been around for some time. There are numerous examples of works by Henri Matisse dating from the middle of the last century that use the technique, which involves pieces of paper being cut into shapes and arranged to form a design or picture.

The Cutout filter is grouped under the Filter > Artistic options, and produces the kind of flattened results synonymous with vector artwork. The effect is enhanced by the simplification of the shapes, giving the impression that they've



The Cutout filter will simplify your images, but with a little configuration you should be able to retain their identity

been created using hand-cut sugar paper. You can use the Cutout filter to produce a range of effects.



Getting animated

The Cutout filter is ideal for converting images into simplified vector artwork for backgrounds or objects in animations. You might even choose to use the technique for converting images into Flash characters that you animate using the web animation package.

EXPERIMENTING WITH CUT-OUTS

- ☐ **THE NUMBER** of Levels slider determines the amount of different colours your filtered work will contain. At a higher setting, you'll get a little more tonal variety from coloured images, while reducing this value for black and white images creates more of a silhouette effect.
- ☐ **EDGE SIMPLICITY** enables you to specify how precisely the cutout follows the image's original lines. At a high setting, your image will appear to have been cut out very quickly, with only basic shapes considered.
- ☐ **THE EDGE FIDELITY** option works closely with the Simplicity option to control the detail of the effect. At a high setting this will ensure that edge details are more faithfully rendered by the filter.
- ☐ **TO CREATE** a relatively faithful reproduction of your original image, set the Number of Levels and Edge Fidelity to a high setting, and reduce the Edge Simplicity to a low-to-medium position.

The Film Grain filter

Grunge-up your digital photographs so they take on the appearance of high-ISO film shots

Digital photography is taking over from film by virtue of the immediacy of its results, and its sheer convenience. With a digital camera there's no need to send your films off to the chemist, only to find, on their return, that you've had the wrong settings applied to your camera and your images are bleached-out and overexposed.

However, film has been around for so long that certain characteristics have become synonymous with photography, and one such effect is film grain. This is generally most

noticeable on images that have been taken with a fast ISO film, and gives photos a grainy appearance that can add mood and atmosphere.

Digital images can be affected by a similar phenomenon – noise – but this doesn't have the same visual appeal. However, you can easily suggest the appearance of grain using the Filter > Artistic > Film Grain option. Using this filter you can emulate anything from a subtle texture to some more extreme retro effects, complete with overexposure and oversaturated colours.



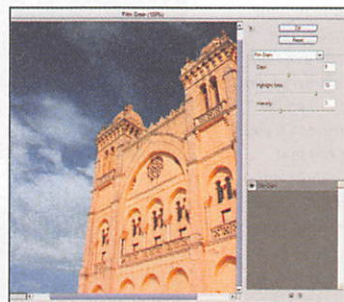
Removing noise

Noise can affect both film and digital images, adding blotchy, mottled effects to areas such as the sky. Run images through the Despeckle filter first to reduce the noise, and prevent it from interfering with the Film Grain filter.

CONTROLLING THE FILTER

The Film Grain effect can be as subtle or as dramatic as you like

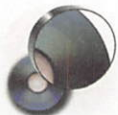
The filter's controls comprise three sliders, which control the Grain, Highlight Area and Intensity. Increasing the Grain value will naturally add a more obvious texture to your image, while Highlight Area affects an image's Levels, making dark areas darker and bright areas more exposed. You can balance these extremities out with the Intensity slider, and by experimenting with this and the Highlight Area slider you can get some interesting retro photographic finishes. But, if all you want to do is add a touch of grain to an existing image, then reduce the Highlight Area and Intensity sliders, and simply adjust the Grain slider to suit.



Raising the Grain value, and increasing the Highlight Area and Intensity, can create a retro, instamatic camera feel

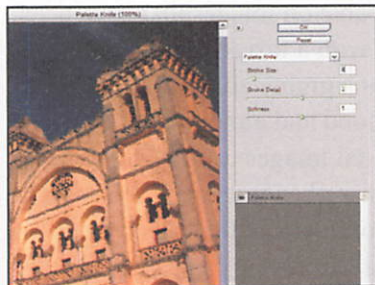
The Palette Knife filter

It may be considered a painter's tool, but with imagination you can create all kinds of effects

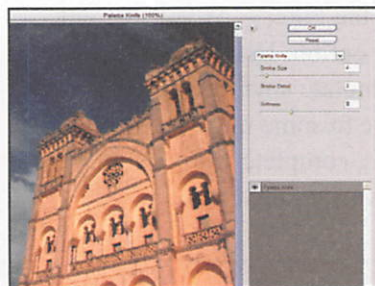


Church.jpg

Use the church.jpg image to dabble with the palette knife. We've chosen this image as it contains areas of both high detail, within the building itself, and less detail, in the clouds.



1 Open the church.jpg file from the CD and choose the Palette Knife filter from the Filter > Artistic submenu. The filter's dialog window has three settings, for Stroke Size, Stroke Detail and Softness. Before we begin to experiment, let's create a more traditional effect, using a low Stroke Size of around 4 and with both the Stroke Detail and Softness settings around the halfway mark.



2 Leave the Stroke Size as it is and increase the Stroke Detail, while reducing the Softness. This results in a more recognisable reproduction of your original image, although the distinctive palette knife effect is replaced by a more abstract impressionist look. This effect could be further modified outside the filter to take on the characteristics of either oils or watercolours.

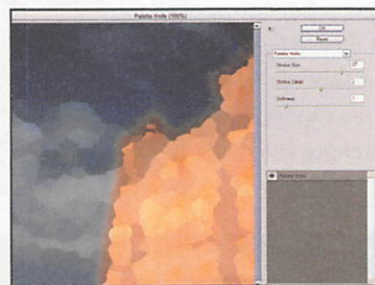


Take your time

Depending on the speed of your computer, the Palette Knife filter may take some time to render, so give it some time to carry out the adjustment before making further changes. If you're running Photoshop CS you'll see a progress bar that shows you quickly how the preview is updating, in the Filter Gallery's status bar.



3 A mid-range Stroke Size combined with high Stroke Detail and medium Softness settings produces a radical transformation, creating a sponged effect. Such settings won't work particularly well for areas of high detail, such as the church itself, but check out the abstract blend that emerges from the softer colours found in the sky.



4 Taking the Stroke Size higher creates an even more abstract blend of colours, with suggestions of tile or mosaic effects. With high Stroke Size, medium Stroke Detail and low Softness settings some interesting random shapes emerge. Raising the Stroke Detail and Softness from these positions would preserve the abstract look, but add further interest through more complex colour tones.

The Sponge filter

This is another filter that can be adapted to produce a variety of interesting finishes

Dabbing a sponge on fresh paint is one of the quickest, easiest and most versatile methods of emulating textures such as stone or metals. The technique blends together complimentary colours and paints, which inherit the random texture created by the sponge.

The Sponge filter is found under the Filter > Artistic options, and is configured using sliders that control the Brush Size, Definition and Smoothness of the finish; these settings are explained in detail below. The filter can create many



The Sponge filter will simplify colour content and detail, and leave behind the characteristic texture created by dabbing a sponge on paint

finishes, from a regular sponging effect through to a more noisy, mottled, pointillist effect.



The Sponge Tool

Don't forget that you can use Photoshop's Sponge Tool to fine-tune the effects of the filter. Grouped with the Dodge and Burn tools, the Sponge Tool can apply subtle changes to the colour saturation of an area, enhancing the filter's effect.

Sponge Variations

- ☐ **THE BRUSH SIZE** slider determines the texture of the sponge. A high setting will create a loose, large sponge, while reducing the setting will create a tighter texture that simulates a firmer sponge.
- ☐ **THE DEFINITION** control enables you to set how much the sponging effect will distort the original image. At a high setting, the image will remain reasonably identifiable.
- ☐ **THE SMOOTHNESS** settings simulate the effect of using a wet or dry sponge. At a higher setting creates the effect of water being added to dilute the paint, while a lower setting will create a dryer, sponged effect.
- ☐ **THE SETTINGS** you choose will depend on your image's composition, dimensions and implied size, and the amount of detail you want to retain. To start with, position the sliders in their central positions, before making small adjustments as you experiment with the settings.



Faux finish

A sponge is commonly used in physical art to create a faux marble or stone effect. Faux is the French word for false, artificial or fake, and is often used in an art context to indicate the imitation of a natural texture.

The Graphic Pen filter

Create effects ranging from pen and ink sketches to old-style metalpoint engravings



The right image

When using the Graphic Pen filter, you'll find the best results can be achieved using an image which contains areas of high contrast. If there are too many variable midtone greys in your image you may find that the filter is less effective, as it can over-complicate the image with excessive hatching.

The Graphic Pen filter, found under the Filter > Sketch submenu, is one of the most intuitive filters to work with because of its simple controls, and the simplicity of the media being emulated. It uses fine, linear ink strokes to capture the detail of the original image. Colour is replaced to leave a monochrome effect, with the currently selected foreground colour providing the ink tone and the background colour used for the canvas.

As with the Conté Crayon filter, you can change the foreground and

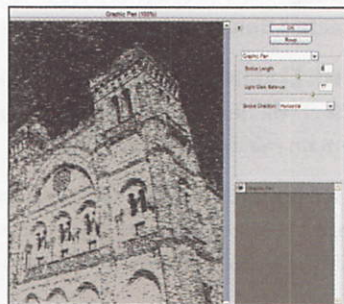
background colours to give the impression of more traditional ink and paper colours. You could, for example, use a reddish-brown foreground and pale yellow background colour to suggest a sepia pigment on parchment.

In addition to specifying the length of the stroke, you have a choice of four stroke directions, and by adjusting the Light/Dark Balance settings, you can easily emulate the appearance and texture of metalpoint engraving techniques, as you'll see below.

METALPOINT

Emulating oxidised engravings is easy with the Graphic Pen filter

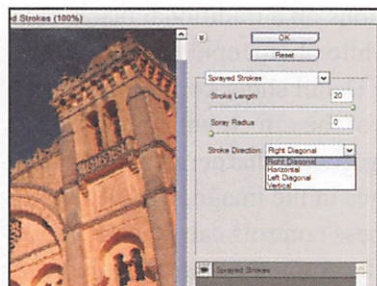
The most dramatic pen and ink results are achieved using high-contrast colours, such as black and white. You can then adjust the Stroke Length and Light/Dark Balance settings to achieve your preferred results. However, if you select a light grey foreground colour and a dark grey background colour, then apply the filter, you'll begin to see how the effect of metalpoint is emulated; setting a medium Stroke Length and horizontal Stroke Direction will enhance the effect. You may need to experiment with the Light/Dark Balance, depending on the complexity of the image; the effect of this will be immediately apparent in the preview window.



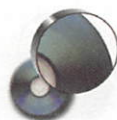
Your foreground and background colours will provide the colours of the scratching and the canvas respectively

The Sprayed Strokes filter

All manner of finishes are possible using the airbrush capabilities of this versatile filter



- 1 Open the church.jpg image from the CD, and launch the Sprayed Strokes filter from the Filter > Brush Strokes menu. There are three controls, enabling you to set the Stroke Length and Spray Radius for the airbrush effect, and choose a Stroke Direction.

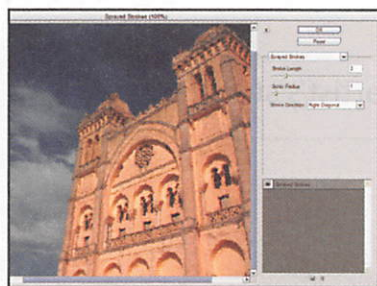


Church.jpg

Use the church.jpg image to see what the Sprayed Strokes filter can do. If you've already used this image to experiment with another filter, don't forget to revert to the original version.



- 2 Your settings will depend on the type of image to which you're applying the filter. For example, if you use a medium-to-high setting for the Stroke Length with a medium Spray Radius you'll find the detail of the church becomes too distorted to be of much use. However, the less-defined sky and clouds take on a more interesting texture.



- 3 To preserve detail in areas such as the church, use a shorter Stroke Length and lower Spray Radius; you'll see that there's little discernible change in the sky, although the church takes on an appearance that suggests it has been painted, rather than sprayed.



Bigger is better

This filter produces the most effective results when the Stroke Length and Spray Radius are set fairly high. However, these settings don't work well on images that contain a large amount of detail, as much of the detail will be lost. Try the filter on a large image, with less detail, to get the most out of it.



- 4 Taking the settings to their extremes, with a short Stroke Length and the widest possible Spray Radius, distorts the image beyond recognition, although this effect might provide a useful basis for a more abstract painting. At these settings, you'll notice very little difference between the Horizontal and Vertical stroke directions.

The Photocopy filter

An inventive artist can use a photocopier for more than just duplicating documents



Controlled extremes

With moderate Detail and high Darkness settings you can create some dramatic results, although with black and white set as your swatch colours the effect can be overpowering. Rather than reducing the Darkness, and losing the effect, rerun the filter using a midtone grey as the foreground colour. This will help to mute the intensity of the effect, while preserving its impact.

You might not think that a photocopier would be a great deal of use to an artist, but such a machine can be put to all manner of creative uses, as you'll see below. The Photocopy filter can be found under the Filter > Sketch options and features two simple controls, for adjusting the Detail and the Darkness settings.

The filter applies a simplified stamp effect to an image, using the currently selected foreground and background colours, which enables you to create some interesting

variations on a traditional black and white photocopied image.

The Detail slider controls the focus of the effect, with a low setting giving sharper definition to edges in the image, while the Darkness controls can be compared with the amount of toner available to your virtual photocopier. With a high Detail setting and a low Darkness setting you can achieve a soft pastel-like effect, while reversing these settings will produce results more reminiscent of pen and ink outlines.

CREATIVE PHOTOCOPYING

Practical uses for photocopied material in the artist's studio

Art students will often use photocopies of images to experiment with, as their disposable nature means they can be distorted or manipulated at will. Bear in mind also that a real photocopier enables images to be scaled and distorted, and photocopies can be cut up and folded for use in collages. You may also choose, as a physical artist might, to blow up a photocopied image to use as the basis for a charcoal or pastel drawing. If your drawing skills aren't particularly good, such a simple line drawing may provide the structure you need to create original artwork using Photoshop's brushes and other tools.



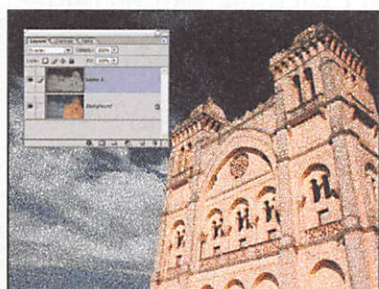
By changing the settings, you can emulate many different natural media styles, such as a pencil drawing

The Reticulation filter

We can enhance the effect of this filter's distorted film textures using blending modes



- 1 Open the church.jpg file and duplicate the Background layer, before choosing the Reticulation filter from the Filter > Sketch > menu. The first thing you'll notice is the apparent mess the filter makes of your image; it simulates the shrinking and distorting of film emulsion, creating results that appear clumped in darker areas and lightly grained towards the highlights.



- 2 Select the duplicate layer and play around with the filter settings until you achieve a balanced conversion. OK the settings to apply the filter, and you'll notice that the Layers palette now contains the original Background layer and the reticulated upper layer. Change the blending mode of the upper layer to Overlay, and see how this affects the base image.



- 3 Next, change the blending mode to Pin Light. Remember, we haven't made any changes to the base image, but the blended filter effect has quite a dramatic effect on our image. On this occasion we've created what could easily pass for a pointillist-style painting.



- 4 You could take this suggestion further by applying the Watercolor filter to the background layer, and reducing the opacity of the upper blended layer. This creates the effect of an pointillist-impressionist watercolour, and preserves much of the image's original detail.



Church.jpg

You can use the church.jpg image once more to try out the Reticulation filter, or use your own image.



Understanding the levels

Try to think of the Foreground and Background level sliders as controlling the image's light balance, in the same way as the Image > Adjustment > Levels option might. This will help you to understand how the controls work, and enable you to produce better-balanced images.

Chapter 10

EMULATING CANVAS AND MEDIA TEXTURES

In this chapter...

- ☐ Apply textures using the Texturizer filter
- ☐ Create an aged oil painting with the Craquelure filter
- ☐ Add grain effects to your images
- ☐ Use the Glass filter to create some unusual textures

Adding a canvas texture to a converted image can complete the illusion that it's original art. While many filters incorporate a texture, you'll sometimes need to create one yourself

While working through the various filters that can be used to emulate natural media, you'll have noticed that some, such as the Underpainting and Conté Crayon filters, incorporate options for embedding a canvas or paint texture in their effect. However, there are many other filters that don't apply any kind of texture.

The Watercolor filter, for example, does an excellent job of producing an image that appears to have been painted with watercolours, but the converted image will look as though it has been painted on a plain paper canvas. Adding an appropriate texture – whether at the same time

as applying the media conversion, using the Filter Gallery in Photoshop CS, or afterwards – can make the difference between your converted image having a convincing, natural appearance, or looking obviously computer-generated.

Filter textures

Fortunately, Photoshop provides a number of filters that we can use to add a finishing touch to our images, all of them found under the Filter > Texture options. The Texturizer filter is probably the one that you'll turn to most often, as it allows you to apply some common canvas textures to your artwork quite easily, as we'll



Page 102 The Texturizer filter provides a quick way of applying a simple texture



Page 103 If the Texturizer filter doesn't have the texture you want, load your own



Page 104 The Note Paper filter is highly effective when used with blending modes



Page 105 Age your artwork by cracking the paint with the Craquelure filter



Page 106 The Grain filter can apply subtle changes, or transform an image



Page 107 The Glass filter provides a wide range of different textures

discover over the following pages. However, there are a number of other related filters that you can use to produce more unusual textures; and don't forget that you can import your own textures quite easily if you're looking to create a more customised end result.

Although the following chapter looks specifically at texture filters, you may want to refer back to Chapter 2, in which we looked at the main types of canvas associated with the various natural media. This will not only help you to decide on the most suitable texture for the particular effect you're trying to create, it will also give you some

alternative ideas on how to create Photoshop canvases, such as by photographing a real canvas.

Get the order right

Bear in mind that if you do use the Texturizer or other Texture filters, these will need to be applied after you've completed the natural media conversion. Alternatively, if you're using the Filter Gallery, remember to create or position the texture effect layer at the head of your stack, so that the texture doesn't affect other filters. If you get the look right, a texture will go a long way towards convincing a viewer that they're looking at a natural work of art.

The Texturizer filter

The Texturizer filter provides all you need to add a finishing touch to your conversion



Integrated textures

The Texturizer filter is a standalone filter that can apply a texture to any effect you've already created. However, you'll find the same options available for the Conté Crayon, Glass, Rough Pastels and Underpainting filters, so you won't necessarily need to utilise the Texturizer filter in combination with these.

While certain filters enable you to apply textures as part of the conversion process, the vast majority don't. This is probably just as well, as you'll often want to make subsequent changes to your work, or apply other filters, and the existence of a texture could complicate things.

When you're happy with your natural media conversion, and you're ready to apply a canvas or other texture to the image, The Filter > Textures menu provides a wealth of options. The Texturizer filter produces the most relevant effects,



The Texturizer filter is grouped along with a number of related tools under the Filter > Texture submenu

in the shape of a series of predefined canvas textures, and also offers you the facility to load your own.

TWEAKING THE TEXTURIZER

You can access the filter via the main Filter menu, and also through the Filter Gallery in Photoshop CS.

The Scaling slider allows you to determine how large the texture will appear, which in turn affects the implied image size. A higher value suggests a smaller canvas.

The Relief settings dictate how textured a canvas will appear. Keeping this towards the lower end will create more realistic results.



With the Texturizer filter selected you can choose from the Brick, Burlap, Canvas or Sandstone default textures.

Should you want to apply your own textures in preference to the default options, you can load them by clicking here.

A number of lighting direction options are available, and there's also an option to invert the selected canvas bump map.

Trying out the Texturizer

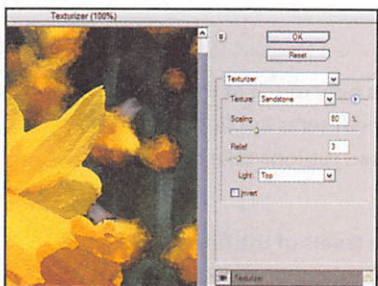
You'll get a better feel for how the Texturizer filter works if you experiment with its settings



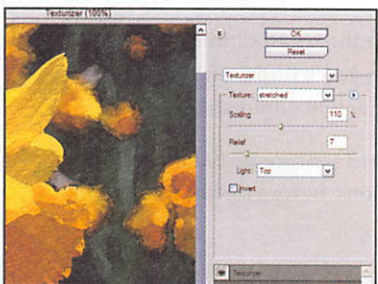
1 Open the `daffodil_water.jpg` file from the CD and you'll see that the image is a simple watercolour conversion, with no texture applied. Although the watercolour effect is convincing, the lack of texture creates a rather flat appearance. To counter this, run the Texturizer filter.



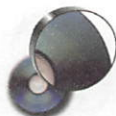
2 In the filter's settings, make sure the Texture option is set to Canvas. Notice how adjusting the Scaling option increases or decreases the implied size of the canvas. You'll also notice how adjustment to the Relief slider makes the texture more – or less – pronounced. We settled on a Scaling setting of around 140%, with a low Relief setting of 3. Experiment with the Light options as well.



3 You may feel the Canvas texture isn't particularly suited to the watercolour style of our image, and that a paper-like texture would be more appropriate. Although a dedicated paper texture isn't available, you can easily emulate the look of paper using the Sandstone option. A Scaling setting of around 80% and a low Relief setting will produce a more acceptable result.

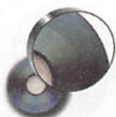


4 If this still doesn't look right, then you may want to import your own texture. Click the arrowhead to the right of the Texture field and click the Load Texture option; this brings up the Load Texture dialog window. Browse to the `stretched.psd` file from the CD, and this will be applied to your image.



Daffodil_water.jpg

Use the `daffodil_water.jpg` file from the CD to experiment with the Texturizer filter. The image is of a photograph that has been run through the Watercolor filter, and would benefit from some added texture.



Stretched.psd

The `stretched.psd` file is a scan of a stretched canvas; we'll use it to apply the canvas texture to our image. If you look at the file you'll see how we've converted the original canvas to grey, to ensure that the dominant midtones don't affect our original image.

The Note Paper filter

If you want to give your canvas the appearance of paper, this filter provides some good options

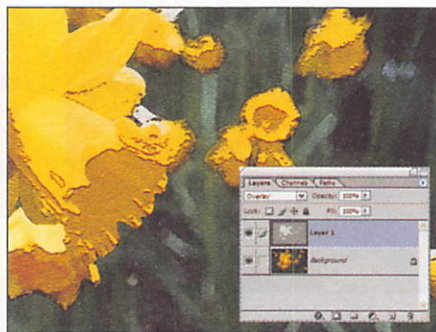


Applying blending modes

If you need a reminder of how to use blending modes to affect the texture of an image, refer back to page 79, where we applied the Water Paper filter.

The Note Paper filter, found under the Filter > Sketch submenu, simplifies an image, and combines the effects of the Stylise > Emboss and Texture > Grain filters to convert the image into a greyscale version, which renders dark areas as holes in the top layer of paper, to reveal the background colour.

This kind of effect is most suited for application to a duplicate layer, which can then be combined with the base image layer using a blending mode. The grey conversion, in combination with the embossed



Using a blending mode over a filtered duplicate layer can introduce texture to the paint, as well as the paper

finish, will generate the textured appearance, as well as adding depth to the paint.



Smoother paint

If you feel that the embossed effect isn't suitable for your image, simply drag the Image Balance setting down to zero, and concentrate on the texture of the paper using the Graininess and Relief options. Such a configuration is more suitable for watercolour or ink effects, where the thickness of the applied medium isn't so relevant.

NOTE PAPER NOTES

- ☐ **THE IMAGE BALANCE** slider determines how much of the original image's detail becomes embossed. When the filter is applied using a blending mode, you'll find that the embossed regions take on the appearance of more thickly applied paint.
- ☐ **THE GRAININESS** slider affects the noise levels of the filter, to give the paper a rougher or smoother texture. You might choose to exaggerate this effect slightly if you're blending the results of the filter.
- ☐ **THE RELIEF** controls enable you to adjust the three-dimensional attributes of the texture. At a higher setting you'll find your paper takes on a rougher appearance; reducing the slider will diminish the effect.
- ☐ **CONCENTRATE** on developing your paper's texture by balancing the results using the Graininess and Relief options, before deciding on the amount of Image Balance needed.

The Craquelure filter

Add a few cracks – and a couple of hundred years – to your oil painting conversions

One feature common to older oil-based paintings is the cracking of the paint that occurs as the oils gradually dry out over the years. This is particularly noticeable if you look at the texture of virtually any old Master Painting; they make use of thicker paints, and as these dry out the image starts to take on the appearance of a jigsaw. Photoshop doesn't have a filter that creates this effect specifically, but it can be emulated reasonably well using the Craquelure filter, found under the Filter > Textures submenu.

In actual fact, the filter is intended to give the appearance of an image that has been painted on to a high-relief plaster surface; it does this by producing a fine network of cracks that follow the contours of the image. By adjusting the available settings, which control the Crack Spacing, Depth and Brightness, you can emulate the kind of finish that you'll find on an old oil painting. This effect is a good example of how the perception of an image can be completely altered by its texture, as you'll discover below.



Realistic oils

For the ultimate oil paint texture you might want to consider enhancing the Craquelure effect with the Texturizer filter. The Craquelure effect will modify the appearance of the paint, while the Texturizer will enhance the appearance of the canvas.

TEXTURE TRANSFORMATIONS

See how a texture can turn a watercolour into an oil painting

As the Craquelure filter is primarily designed to emulate paint on plaster, we'll need to reduce the strength of the effect to create a more realistic texture for a painting. Using the same daffodil_water.jpg image as before, open the filter from the Filter > Texture menu. Reduce the Crack Spacing to a low setting of around 10, and your image will begin to break apart. If you then set the Crack Depth to a mid-to-high setting you'll start to see some relief added to the texture. Finally, a reasonably high Crack Brightness setting will keep the effect subtle, ensuring that the texture doesn't take over the image, and creating a realistic ageing effect.



By applying a new texture we've transformed our original watercolour into a convincing oil painting

The Grain filter

With a number of different finishes on offer, there's more to this filter that you might think



The origins of grain

Although grain isn't a natural media texture, you'll soon discover how it can add some body to your conversions. The Grain filter is another darkroom tool, although, in contrast to the Film Grain filter, the Grain filter is designed to emulate the appearance of an old or poorly stored photograph.

You might not think that adding grain to an image would be a great deal of help in the quest for the perfect texture, but if you dig out the tool from the Filter > Texture options, you'll soon see how this filter can help when you experiment with the many different Grain Types that are available.

The sliders that control the Intensity and Contrast of the grain are self-explanatory, but the variety of grain effects make this a very interesting filter to use for emulating not just film effects, but also more



It's not all about adding noise. The Speckle option can be used to create mixed-media-style results, such as this illustrative image

experimental textures, as you'll discover in our overview of the grain types below.



Best settings

Balance your filter conversions by first setting the Intensity and Contrast sliders to their mid-range positions. Don't forget that you can refer back to your original image by unchecking the Preview option in earlier versions of Photoshop, or by clicking the eye icon next to the effect layer entry in the Filter Gallery if you're running CS.

GRAIN TYPES

- ☐ **THE REGULAR** and Soft grains make themselves apparent through pixelated noise. This effect becomes more obvious in the Enlarged option.
- ☐ **THE SPRINKLES** and Stippled options take the effect to extremes, with grain appearing as fine white random dots. The latter version will render your image in greyscale.
- ☐ **THE CLUMPED** and Contrasty options are less noisy, but will group together similar colours, creating the look of an old photograph.
- ☐ **THE HORIZONTAL** and Vertical variants emulate film that's been scratched in either of those directions. Darker regions of your image will be emphasised, with only brighter colours showing through.
- ☐ **THE SPECKLE** version offers the most creative options, with the ability to give an image illustrative properties, or even the look of painted glass.

The Glass filter

Distort or completely transform your work by choosing from this filter's variety of finishes

The Glass filter provides a range of textures that can be adapted to transform the look of your work. Found under the Filter > Distort submenu, this filter provides basic controls for determining the levels of distortion and smoothness in the texture. You can choose from four default textures – Blocks, Canvas, Frosted or Tiny Lens – and specify the scale of the texture. As with the Texturizer filter, you also have the option to load your own custom textures. A little experimentation with your images will soon reveal



We've managed to create a van Gogh-style version of our daffodils using the Glass filter's Frosted texture option

how the filter can dramatically transform not just their texture, but their entire appearance.



Creative conversion

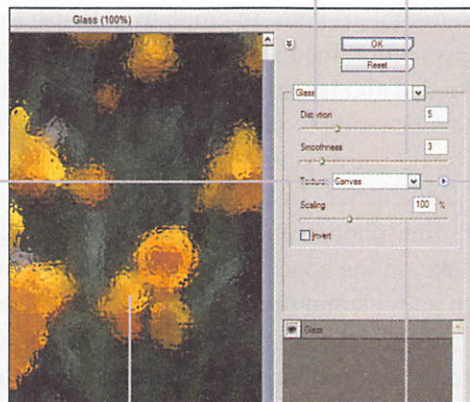
The Blocks texture option emulates the appearance of glass bricks; apply this with a high distortion level and medium smoothness for the best results. The Tiny Lens option, on the other hand, creates an interesting effect not unlike a smooth, textured half-tone effect.

THE GLASS FILTER

To get a simplified idea of how it works, users can think of the Distortion slider as affecting the thickness of the emulated glass

The Texture field features a selection of textures that can be applied to your work.

The preview gives you the opportunity to view your changes in real time. Remember that you can quickly revert to your original image by toggling the effect layer's visibility.



The Smoothness option will help to reduce the amount of distortion, creating a more faithful reproduction of the original image.

If none of the default glass textures prove suitable for your project, click this button to load your own.

The Scaling control is similar to the Texturizer filter's Relief option, and controls how detailed the glass texture should be.

Chapter 11

PUTTING THE THEORY INTO PRACTICE

In this chapter...

- ☐ *Get artistic with Photoshop paints*
- ☐ *Convert an image into a pen and ink drawing*
- ☐ *Try out an alternative pen and ink technique*
- ☐ *Create your first dry media artwork*

Now it's time to have some fun, as we use the tools and techniques we've looked at in this Focus Guide to create four works of art in the style of the most popular natural media

Throughout this Focus Guide we've seen how you can use Photoshop's many tools and features to transform your photographs, or your own digital artwork, to emulate the various natural media. Armed with these tips and techniques you should now be ready to tackle your first full-scale conversion projects with real confidence. In this chapter we'll take four photos, and convert them to take on the appearance of paint, pen and ink and dry media artworks, giving you hands-on experience that you'll be able draw on to transform your own images.

In our first project we'll emulate the look of a watercolour painting,

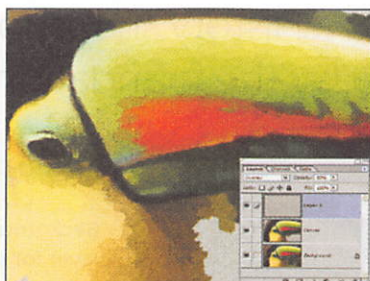
but, rather than using filters to make the conversion, we'll rely more on configuring brushes, and discover how we can use the Art History Brush to help us emulate the textures you'd find in a real watercolour. We'll also introduce an alternative method for applying textures to your images, using a colour fill.

Filter conversions

We'll follow this by adopting a more filter-based approach as we turn our hand to a pen and ink conversion. The technique that you use to emulate this medium, and the look of the resulting conversion, depends greatly on the nature of your original



Page 110 Take a photograph and start the process of turning it into a painting



Page 112 Give the converted image a finishing touch by applying a texture



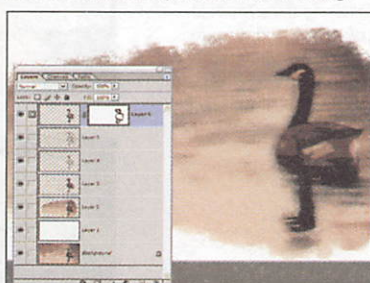
Page 114 You can use the Charcoal filter to emulate a pen and ink drawing



Page 116 Take an alternative approach to pen and ink using the High Pass filter



Page 118 Simplify a photo to give it the look of a typical dry media image



Page 119 Use different-sized brushes on new layers to build up your effect

image. We've featured methods for converting two very different photos; a softer, less detailed image, and one containing hard edges and lots of detail.

We'll round the chapter off by combining some of the dry media techniques we've looked at to create a pastel conversion, making use of some of the dedicated brush sets that Photoshop provides.

Beyond this book

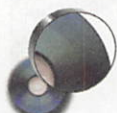
As you work through the following pages, you should begin to realise just how versatile Photoshop is when it comes to emulating natural media. While there are a few rules that you

need to stick to in order to get the most realistic results, Photoshop's flexibility also means you have a fair degree of licence to experiment.

There are a number of factors that will ultimately determine the success of your conversion, not least the suitability of the original image for the technique you want to emulate. As with physical art, certain subjects don't lend themselves well to particular media, so you may need to experiment with a few styles before you get a satisfactory result. But, if you apply what you've learned here to your own projects, you'll soon be able to turn out a convincing natural media artwork every time.

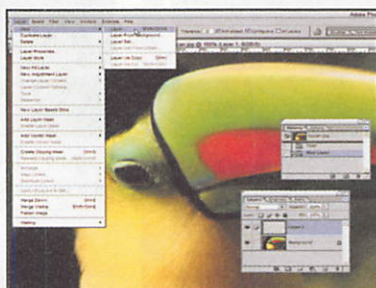
Starting your painting

We'll use a History snapshot and the Art History Brush to lay the foundations for the conversion

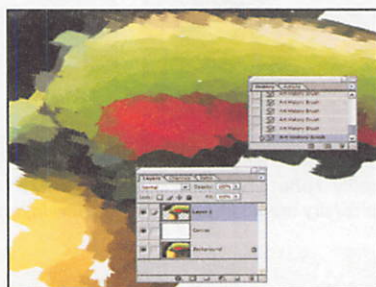


Toucan.jpg

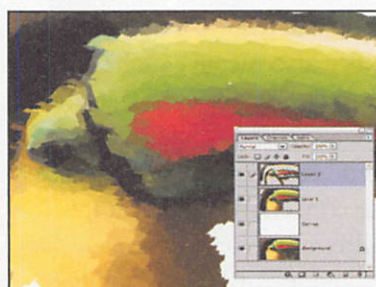
Use the toucan.jpg file on the CD to carry out the following steps. The bold colours and shapes make this a good example of an image that we can convert, while preserving its identity.



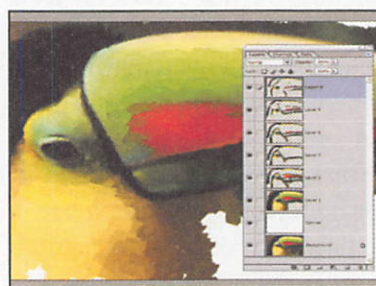
- 1 Open the toucan.jpg file from the CD. Create a new layer above the Background layer; we'll use this as the base layer for our image. Notice that the History palette will automatically store a snapshot of our original image, which we can refer to and use as we continue to create our image.



- 2 Fill the new layer with white and name it Canvas. Then create another layer above this, leaving it transparent. Select the Art History Brush and choose a large rough brush with a diameter of around 60 pixels. You'll notice that there's a brush icon to the left of the original snapshot within the History palette, so simply paint strokes on to the canvas to create the basis of our image.



- 3 Your painting will be looking fairly rough at this point, but don't worry about this, as we'll continue to clear things up. If you liken the process to building an original painting in stages, you'll get the idea of what we're trying to achieve. Create another new layer, and choose a smaller brush of around 36 pixels to begin painting in some of the subject's detail and edge areas.



- 4 Continue the process, adding more layers and gradually reducing the brush size, until you get to the point where you've managed to bring back enough detail around areas such as the eye, beak and outlines. This may take some time if you want your painting to be fairly faithful to the original image, or it may only take a few additional layers if you're after a more rough-and-ready finish.

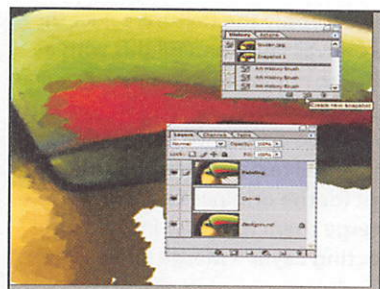


Adding layers

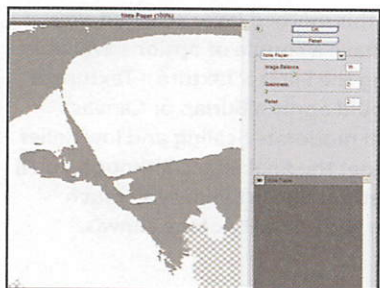
Most Photoshop users will tend to make use of the Layers palette shortcut icon to create a new layer, but you can also use the keyboard shortcut [Control]+[Shift]+[N], or [Command]+[Shift]+[N] on a Mac.

Thicker paint

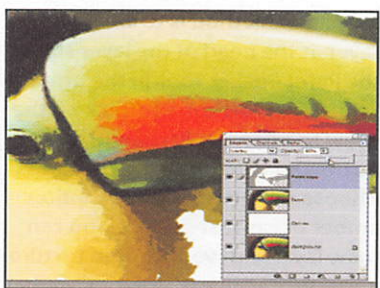
With so much paint having been applied, we need to create more depth in our painting



5 With the basic effect complete, now is a good time to take a snapshot of our progress. Click the camera icon in the History palette so we can return to this stage later if need be. Next, link together all the paint layers – this should be your entire layer stack, other than the Background and the Canvas layer – and use the Layer > Merge Linked option to group your paint effects into a single layer.



6 Name this layer Paint, and duplicate it using the Layer menu, the Layers palette icon or the keyboard shortcut of [Control]+[J], or [Command]+[J] on a Mac. With your new layer selected, open the Note Paper filter, and adjust the Image Balance slider until you get a moderate amount of detail apparent; we used a setting of around 15. Remove any grain, and apply a low Relief setting of around 2.



7 OK the settings to return to the main canvas, and you'll see how your layer has been effectively turned into a two-tone image with light embossing. Select the layer, and from the blending mode options at the head of the Layers palette choose either the Overlay or Multiply option. If this makes the image overly bright, reduce the opacity of the layer to around 50%.



8 If the paint appears too thick due to the effect of the blending mode, use the Smudge Tool to soften any lines whose appearance you want to reduce. To bring back some of the intensity of the original colour, create a Curves adjustment layer using the icon at the foot of the Layers palette, and drag the curve downwards somewhat until you get the intensity you want.



Unusual blends

You might choose an alternative filter and blending mode combination to add some depth to your paint. Try the Emboss filter for more exaggerated results, while the Difference blending mode can produce inverted colour effects.



Clipping adjustment layers

We've already dabbled with adjustment layers, so you should have a good idea of how effective they can be at changing the look of an image without altering existing pixel content. However, you'll also no doubt have realised how they affect each and every layer that falls beneath them. If you want to restrict the effect of the adjustment layer, position it above the layer you want to adjust and use the Layer > Create Clipping Mask option.

Applying the texture

We can add some finishing touches to our image with the Paint Bucket's pattern fill option



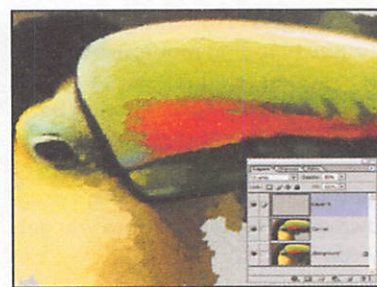
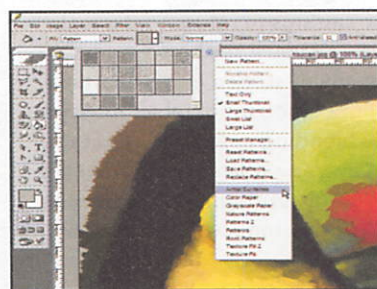
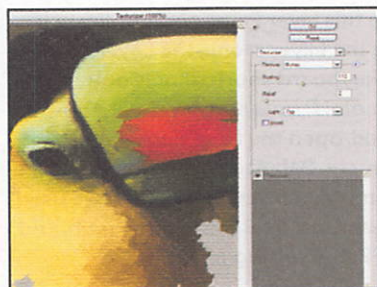
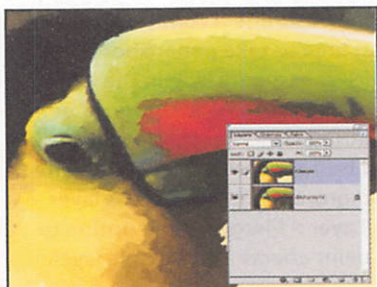
A snapshot in time

Whenever you make the decision to drastically alter your work, such as by merging layers for example, it's recommended that you take a History snapshot of your work. This way you can continue to try out new effects, safe in the knowledge that you can revert to a previous stage with a click of the mouse.



Boosting texture areas

You may find that certain textures, when applied through blending modes, may not display as strongly as you might have expected. If you use the Paint Bucket Tool technique, you can specify a blending mode in the options bar, and apply the effect again directly to the canvas to boost any areas in which the texture is less pronounced.



9 Before we apply the texture, select the white Canvas layer, and fill this with a suitable colour to emulate the tone of a canvas material; we've chosen a pale grey as this suits the blending mode option we'll use later for displaying the final texture. Then, link all your layers, except for the original Background layer, and merge them together into a single layer by selecting Layer > Merge Linked.

10 With this merged layer selected, you now have a couple of options available to you. Using the Filter > Texture > Texturizer filter you could apply a Burlap or Canvas texture, with moderate Scaling and low Relief settings, to get the final effect, although you'll find this method doesn't allow you much control over the intensity of the canvas.

11 An alternative method is to create a new layer at the head of the layer stack and select the Paint Bucket Tool. In the options bar, change the Fill to Pattern, and click on the Pattern preview to open the Pattern picker. Click on the arrowhead to open the palette menu, and choose the Artist Surfaces option to load a number of canvases as fills. You can now fill the new layer with your chosen texture.

12 All that's left to do now is change the fill layer's blending mode, so that the new texture fill merely influences the painting layer beneath. Although this method gives us less control over the scale of the texture, it does have the advantage of allowing us to control the opacity of the layer, so that we can reduce the texture effect if it's overpowering the actual image.

The finished painting

Let's review the completed image, and ponder how we might have done things differently

You'll no doubt have realised as we worked through our conversion that there were several stages at which we could have chosen to make use of different brushes, filters or blending modes to create very different results.

As you continue to experiment with emulating paint media, we'd recommend that you work on simple original images initially, so that you get to know how different effects work on different compositions. The final results can be as abstract or as realist as you like, but either way



With its bold colours and well-defined shapes, our original photo is an ideal image on which to practise the techniques we've used

they need to be authentic to fool a viewer into thinking that they're looking at a real work of art.



Size matters

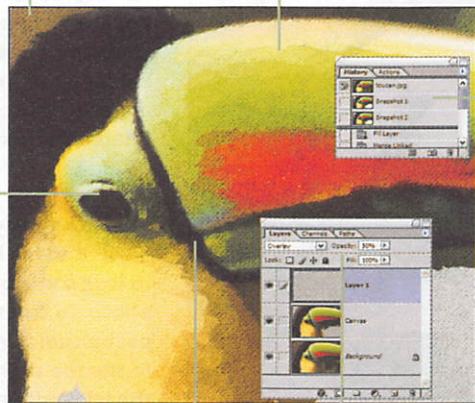
If you plan to move on to bigger and better things, you'd be well advised to source as large an original image as possible. If you hope to create a recognisable landscape, for example, you'll need to have captured as much detail within your original image as possible; attempting to convert a less-detailed image will simply result in a confused abstract mess, with little identity.

KEY CONVERSIONS

The texture was applied using a fill pattern, which enabled us to vary how the texture influenced the image by changing its opacity.

To paint back detail in areas such as the bird's eye and edge feathers, a fine brush size was used for the Art History Brush.

Edges and defining regions of the image were made clearer by using smaller brush strokes on new layers.



The Art History Brush was used to paint back detail from the original image, taking on the behaviours of the configured brush.

Keeping regular snapshots in the History palette enabled us to experiment with different techniques.

Blending modes played an important role in creating paint depth and canvas texture, providing important finishing touches.

Pen and ink techniques

How you create a pen and ink style artwork depends very much on your original image



Angel.jpg

Use the angel.jpg file from the CD to try out this particular method. The greyscale tones provide an ideal image for conversion into a monochrome pen and ink style.



- 1 Open the angel.jpg file from the CD, and make a duplicate of the original Background layer to preserve the original image. To begin converting the image, select the duplicate layer and run the Filter > Sketch > Charcoal option.



- 2 Drop the Charcoal Thickness down to its lowest setting and you'll see how the stroke begins to look a little more nib-like. Further adjustment to the Detail and Light/Dark Balance settings will help to enhance the effect; we settled for a Detail setting of 3, and a Light/Dark Balance of 56.

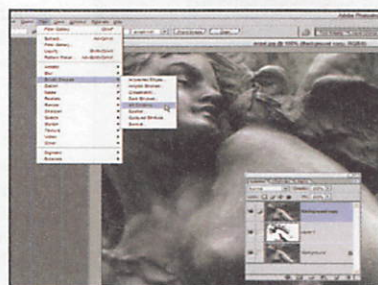


Coloured ink

Don't assume that you have to use black ink for your conversions. The colours currently active within your toolbar swatch will be used as the foreground and background colours; so if you want to offset pink against blue, all you need to do is change the swatch before running the filter.



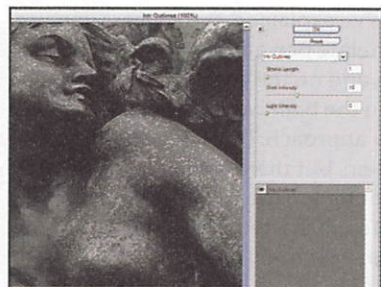
- 3 OK the settings (or create a filter layer in the Filter Gallery) and further modify the image with the Graphic Pen filter, which is also stored with the Sketch options. Raising the Stroke Length to its maximum and choosing a mid-range Light/Dark Balance will balance-out the Charcoal effect. A Horizontal or Vertical Stroke Direction will counter the Charcoal stroke, creating a crosshatch effect.



- 4 Our image is beginning to take on a pen and ink look, although we're starting to lose some of the definition of the original photo. To counter this, duplicate the original background layer again and drag the duplicate to the top of the layer stack, before running the Ink Outlines filter from under the Filter > Brush Strokes submenu.

The finishing touches

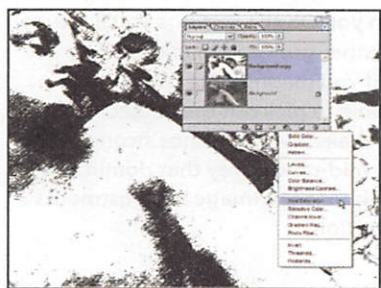
We can fine-tune our conversion using a blending mode and an adjustment layer



5 What we're trying to do here is create more solid boundaries around shapes, while reducing the shadows and highlights of the image to more midtone levels. To do this, we'll set the lowest Stroke Length and Light Intensity values for the filter, while setting a medium-to-low Dark Intensity.



6 The preview won't look very pretty, but OK the setting to apply the filter, and return to your image. If you now apply the Vivid Light blending mode to the layer, and reduce the opacity slightly to around 85%, you'll see how the sharp lines redefine the original composition. The effect has the added bonus of adding some background detail.



7 The conversion is starting to take shape, although you may feel that the tones are a little too extreme. To change the colours, create a Hue/Saturation adjustment layer by choosing Layer > New Adjustment Layer > Hue/Saturation, or by choosing the relevant option when you click on the shortcut icon at the foot of the Layers palette.



8 This will create the adjustment layer at the head of the layer stack and prompt the regular Hue/Saturation dialog settings. Check the Colorize option, and play around with the sliders to change the colour of the ink. We settled with a Hue of 50, Saturation of 24 and Lightness of +24, to create a typical sepia ink finish to complete the effect.



Patience is a virtue

The Ink Outlines filter is memory-intensive, and may take some time to render on slower systems. Photoshop CS provides a progress bar at the foot of the Filter Gallery, while the preview area in previous versions of Photoshop will render incrementally, so be patient and you'll soon see how your changes affect the image.



Angel_final.jpg

You can check out our converted image on the CD; it's called angel_final.jpg. Don't worry too much if your images differs from ours, as the process of converting an image into such a format will often involve a few subjective decisions along the way.

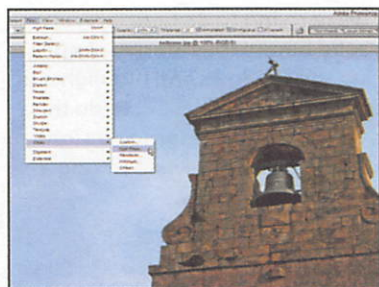
An alternative method

There's more than one way to convert your image into a realistic pen and ink drawing

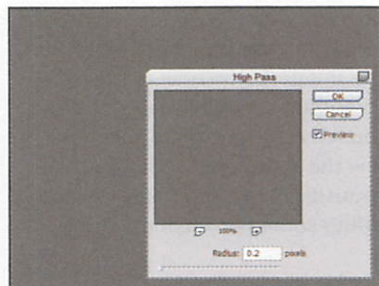


Belltower.jpg

Use the belltower.jpg file from the CD to follow this alternative method of converting an image into an effective pen and ink drawing. The belltower_final.jpg image will give you some idea of the kind of results you should expect.



1 As we've explained, the process you use to emulate pen and ink will depend on your image, and on the style you're trying to mimic. Open the belltower.jpg file from the CD to try a new approach. This image has less tonal variation, but there are some nice sharp lines, both outlining the tower and in the brickwork. To get started, select the **Filter > Other > High Pass** option.

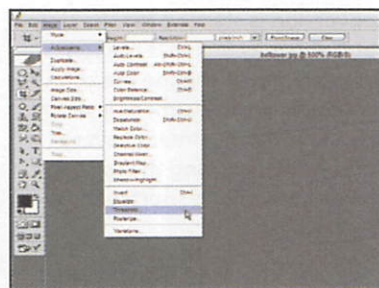


2 The High Pass filter retains edge details in the specified radius, controlled by a slider. At a low Radius setting the filter will remove low-frequency detail, but you'll need to look very carefully at the apparently grey image to see the effect. When using the filter on your own images you'll need to experiment to get the best results, but for our image you can safely take the Radius down to 0.2 pixels.

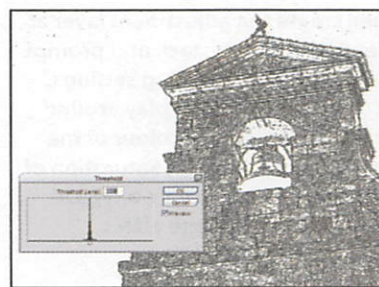


Bitmap mode

Combining the High Pass filter with the Threshold command, as we've done here, is a useful technique to use should you wish to convert your images into bitmap mode. Try making the conversion by changing the original RGB mode to greyscale first via the **Image > Mode** submenu, before repeating the process to convert to Bitmap, and you'll see how much clearer the results when you follow the steps on this page.



3 When you OK the settings you'll return to a rather grey and blank-looking image, but if you magnify the canvas you should be able to pick out the subject outlines. To make these outlines stronger, and remove the mid-range grey that dominates the image, choose the **Image > Adjustments > Threshold** option.



4 You won't need to change the Threshold setting, so just OK the dialog and you'll see how your image is instantly transformed into a very passable pen and ink version of your original image. You may notice a few odd pixels cluttering the background, but these can be easily removed.

Variations on a theme

You'll need to experiment to find the best way of converting a particular image to pen and ink.

We've provided a couple of examples that should help you to get a feel for the process of converting images to pen and ink. However, due to the varied nature of source images there are no hard and fast methods; you'll have to rely to a large extent on trial and error. On some occasions the Graphic Pen filter may do the trick, while other images will require painstaking editing by hand. However, if you familiarise yourself with the various pen and ink techniques, get hold of a graphics tablet, and keep practising,



The belltower.jpg will enable you to practise converting artwork into clearly defined line art, while the angel.jpg will help you create textures

then before you know it the process of creating pen and ink images will become second nature.



Finding the right image

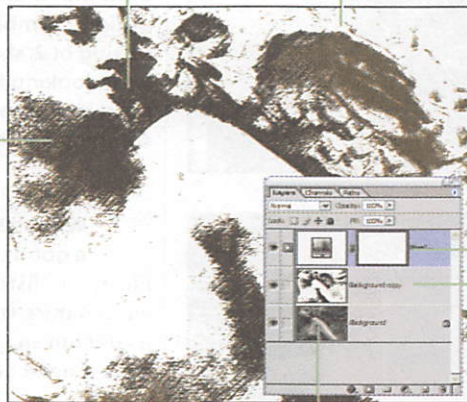
As you continue to explore different methods of creating pen and ink images we'd recommend that you work on images that have relatively simple content. Images of isolated objects provide a good place to start, while pictures of buildings, such as skyscrapers, will ease you into the process of creating more complex conversions.

PEN AND INK TECHNIQUES

The sepia ink effect was added by applying a Hue/Saturation adjustment layer with the Colorize option checked.

For the original texture we used a blend of the Charcoal and Graphic Pen filters. We used the lowest thickness setting for the Charcoal filter to simulate ink shading.

The original image was duplicated early on to provide a constant reference point. This also enabled us to create further duplicate layers for extended filter adjustment.



The outlines were created using the Ink Outlines filter, which added definition to the image, as well as introducing background detail.

Adjustment layers provided a safe method of applying adjustments without making any changes to the actual pixel content of underlying layers.

The original Charcoal and Graphic Pen filters were applied on a single layer, which was merged with a separate layer containing the Ink Outlines blending mode.

Creating a dry media conversion

We'll start by reducing the number of colours in our image to enhance the simplified effect

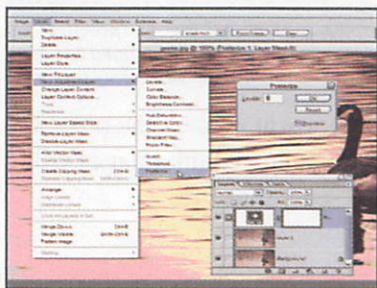


Goose.jpg

Use the *goose.jpg* file from the CD to carry out the following steps. The soft tones of the image, and the natural lines found in the water, are sympathetic to dry media techniques.



1 Open the *goose.jpg* file from the CD for a sepia-influenced image of a goose on a rippled pond. The composition of this image is ideal for converting to a pastel or charcoal effect, as the random lines of the ripples can be nicely emulated by dry media techniques. Similarly, the goose itself is a relatively simple shape, which can be given a roughly sketched look while preserving its identity.

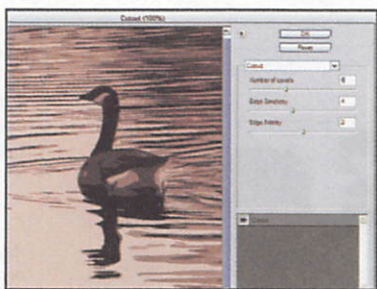


2 As the dry media look we want to create will have simplified colour content, we can give ourselves a head start by reducing the number of colours in our image. Begin by duplicating the Background layer, then create an adjustment layer using the Posterize option and decide on the number of colours you want to reduce your image down to. We found that eight provided a warm balance of colours.

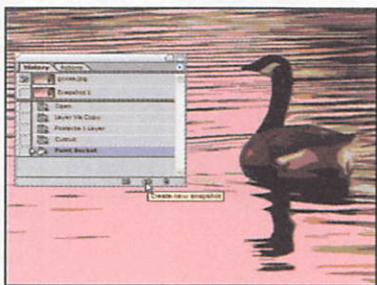


Posterising images

The *Posterize* command enables you to specify the number of tonal levels for each channel in an image, and then maps pixels to the closest matching level. With three channels to an RGB image therefore, you'll find that setting the tonal value to 2 will provide six colours – two for each channel.



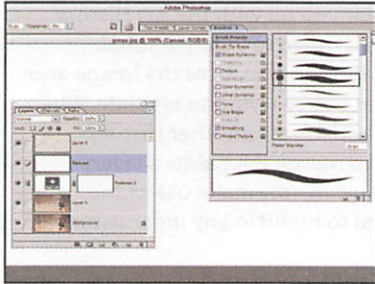
3 We can further simplify our image by applying the Cutout filter, found under the *Filter > Artistic* options. A setting of 4 for both the Number of Levels and Edge Simplicity options, combined with an Edge Fidelity setting of 2, should achieve the kind of effect we're looking for. OK the filter to return to the main image and see how the effect works when combined with the Posterize adjustment layer.



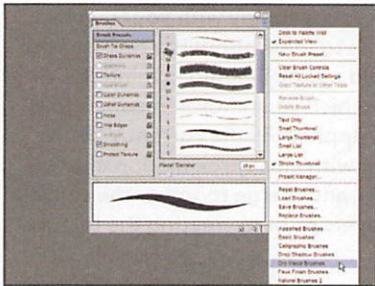
4 With the preparation complete, now is a good time to save a snapshot of our file in the History palette. This will ensure that we can trace both our original image, through its default snapshot, and revert to this present state if need be.

Applying the media effect

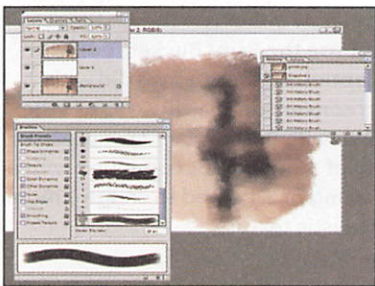
We'll use the Art History Brush to recreate our original image with a dry media look



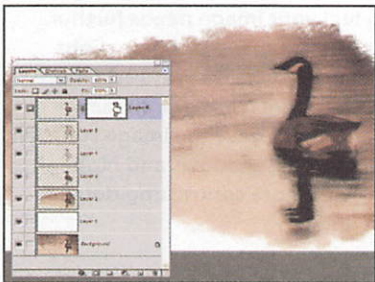
5 The next step is to prepare our canvas. Create a new layer filled with white, drag it to the top of your layer stack and name it Canvas; this will act as your new background. Then create a second new layer, leaving this transparent, to which we can begin to apply our dry media texture. Before we do this we need to load the most appropriate brushes for the task, so head for the Brushes palette.



6 The default brushes aren't much use for our dry media purposes, so expand the palette menu; towards the foot of the menu you'll see Dry Media Brushes. Select this set, and Photoshop will ask whether you want to replace your default brushes. Click OK, and you'll see a variety of more relevant tools appear in the preview window.



7 Select the Art History Brush, and set its source as the new snapshot we created by clicking the button to the left of the thumbnail in the History palette. Choose the Pastel Medium Tip brush from the Brushes palette – you can see the name of a brush by hovering the mouse over the preview – and start to paint over the image to create the base layer.



8 Using the same technique as for the Paint conversion you can build up your image by creating more layers, and applying reduced brush sizes to gradually bring out the detail. For the final layer we've made use of a small Conté Crayon to add texture to the water and the goose, while restricting its range through an associated mask, so that the background isn't affected.



Accessing the Brushes palette menu

If you access the Brushes palette while it remains docked to the Palette Well, you'll be able to access its menu by clicking the small arrowhead that appears by the Brushes title within the tab. If you've detached the Brushes palette, and it's floating on your desktop, you'll find the same arrowhead at the top-right corner of the palette.



Reverting your brushes

Once you've carried out any work with a specialist brush set you'll inevitably want to revert your brushes to their original settings for more routine tasks. To do this, simply head back into the Brushes palette menu and choose *Reset Brushes*.

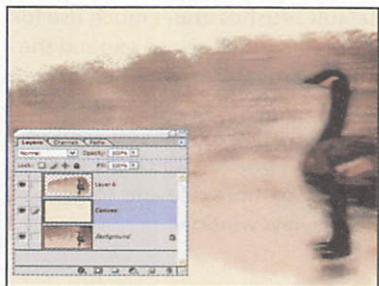
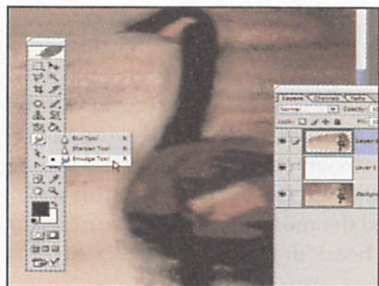
Adding a canvas texture

We'll finish off our image by blending the media effects, and adding an appropriate canvas



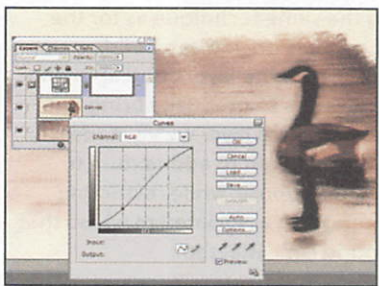
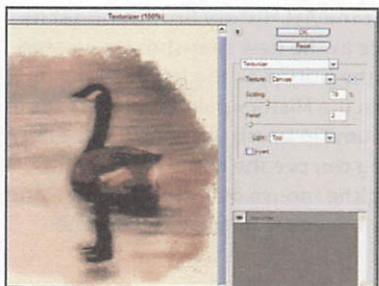
Mixing textures

Be aware that some of the Dry Media brushes will automatically create a texture effect when they're applied. If this is the case with your chosen effect you'll need to make sure that you apply this evenly, and bring out detail by reusing the same brush, after reducing its size and implied sharpness.



Fools rush in

Taking regular History snapshots of your work makes it easy to revert to particular stages as you develop your work, but remember that these snapshots will only be available during the current session. If you close and reopen your file, they'll be lost. If you want to retain access to these states at a later date you'll need to back up the file regularly.



9 How far you go with the Art History Brush is down to your personal preference, the complexity of the image and the style that you're trying to emulate. When you've finished, create another History snapshot and merge the painted layers together. You can now make use of the Smudge Tool to blend in any inconsistencies.

10 Once you're happy with your results it's time to think about the texture your image should adopt. Bearing in mind the kind of paper to which your chosen media would typically be applied, fill the currently blank Canvas layer with an approximation of the paper colour, and merge together the canvas and paint layers prior to creating the texture.

11 You can now either run the Texturizer filter or use the Paint Bucket Tool with the Pattern option selected, as we did with our painting conversion. We chose to use the Texturizer filter with the regular Canvas texture. A low scaling of around 80%, combined with a low Relief setting of 2, helped to create a more subtle, yet realistic texture.

12 If you feel your image needs further changes, perhaps to bring out light or colour balance, you can always add more adjustment layers. We felt that a shallow Curves enhancement gave the image sufficient lift, by enhancing the shadows and highlights, and bringing out more contrasting detail in our finished image.

Review your results

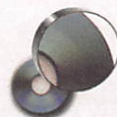
In a few simple steps we've transformed our photo into a convincing dry media image

We took a hands-on approach to this conversion, rather than relying too much on filters, but, as we've said, the method you use is very much dependent on the source material, and the results you're trying to achieve. Our final image creates an convincing pastel effect, although we could just as easily have taken other routes to create a chalk or charcoal finish, so continue practising with your own images to create different finishes. With a little experimentation, and a better understanding of what tools



This image was a good choice for a dry media conversion, as the similar tones and natural lines were already suggestive of the medium

and filters Photoshop provides, you'll soon get a feel for choosing the right effect for the job.



Goose_final.jpg

Take a look at the `goose_final.jpg` file on the CD if you want to compare our completed version with your own results.

THE DRY MEDIA APPROACH

Applying a subtle colour to the background before applying the texture helped to add realism, and made the end texture more noticeable.

The media texture was created using the Art History Brush in combination with the dedicated Dry Media Brushes set.

The detail of the subject was further enhanced with a complimentary dry media style that preserved its identity.



To restrict the effect of the less-detailed background bleeding off the main subject a mask was used to contain the subject.

To create the final texture we merged the end results and applied the Texturizer filter, but not before saving a snapshot of our work.

Reducing the brush size and reapplying the Art History Brush allowed additional detail to come through in new layers.

On your CD-ROM

Here's how to get the most out of the disc that accompanies your Focus Guide

Featured resources...

- ☐ **buZZ.Lite**
(full plug-in)
- ☐ **20 AbsolutVision**
stock images
- ☐ **Exclusive Photoshop**
video lessons
- ☐ **TwistedBrush**
- ☐ **Hundreds of brushes**
courtesy of
www.cybia.com

To access the wealth of resources and software on your disc, including the full version of buZZ.Lite, first insert the disc into your CD drive. Whether you're using a Mac or a Windows PC, the disc will work equally well. If the disc interface doesn't run automatically, look at the facing page to find out how to start your installation manually.

Before you go on

The first item that should appear on your screen is the disclaimer

window; here you'll need to click on 'I Accept'. Please remember that this disc has been scanned and tested at all stages of production, but – as with all new software – we still recommend that you run a virus checker before use. We also recommend you have an up-to-date backup of your hard disk before using this disc. Future Publishing does not accept responsibility for any disruption, damage and/or loss to your data or computer system that may occur while using this disc, or the data and programs on it. Please

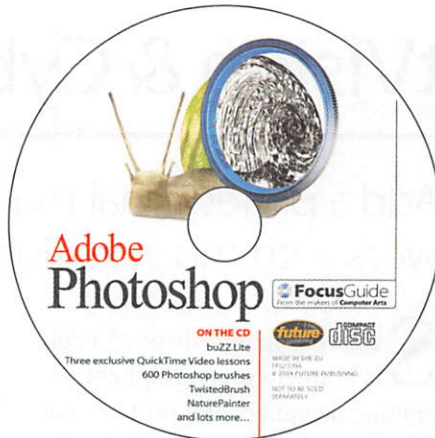
BUZZ.LITE FULL PRODUCT WORTH £45

Transform digital photographs into fantastic natural works of art

The world's first and only 'Simplifier' effect is part of the Buzz.Lite suite, allowing you to remove unwanted detail that clutters your image without loss of focus, colour or edges. Buzz.Lite comes with three remarkable effects, held in what's known as a 'stack', which lets you add, edit and delete filter options that you intend to apply to your digital image. Buzz.Lite is both PC and Mac OS-compatible (though not OS X natively), and runs in a demo mode when you first load it, with 30 separate uses. To unlock the software and use it limitlessly, obtain the serial key to authorise your copy by sending an email to mag@fo2pix.com with 'Creative Buzz Lite' as the subject-line.



www.fo2pix.com



consult your network administrator before attempting to install any software on a networked PC.

Installation

Once your CD interface has loaded, you can access any of the files, software and other resources included directly from your CD. Simply click on the animated 'Click' link and choose the section that you're interested in from the menu. The video tutorials require the latest QuickTime Player, from www.apple.com/quicktime/download.

If you have a query about your disc, email our support team at support@futurenet.co.uk for help. If you want to talk to a member of the team, call 01225 822743. Note that we can only provide basic advice on using the disc interface and installing the supplied software. We cannot give in-depth help on specific programs, or on your particular system configuration.



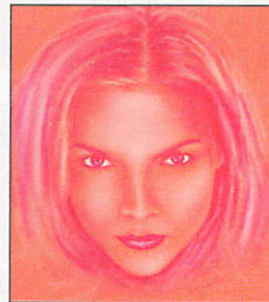
Starting your installation manually

PC users: click on the Windows Start button and click Run. Then click Browse and go to the CD directory in My Computer. Look for a file called PFGi.exe and double-click it. Then click OK in the Run dialogue, and the CD should then load up.
Mac users: Double-click the disc icon, then double-click StartMAC or StartOSX, depending on which OS you're using.

TWISTEDBRUSH (PC ONLY)

Use Photoshop on the PC to create creative natural media effects

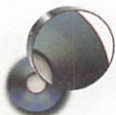
Pixarra offers this art program powerful enough for the professional artist, yet simple enough for the novice. TwistedBrush has an extremely versatile and powerful brush engine, yet it was designed from day one to be easy-to-use. The software features a full collection of realistic natural brushes like watercolors, oils, acrylics, pastels, oil pastels, charcoal, pens, pencils, markers etc. Supporting the brush engine are features including an exceptional brush effects system, tracing paper, masks, filters, random brush generation, scripting, full art sets and more. Installation is fast and painless and not only includes traditional effects such as rotation and flipping, it also provides filters similar to those found in Adobe software.



Get tips from TwistedBrushers:
<http://groups.yahoo.com/group/TwistedBrushers/>

www.pixarra.com

AbsolutVision & Cybia Brushes

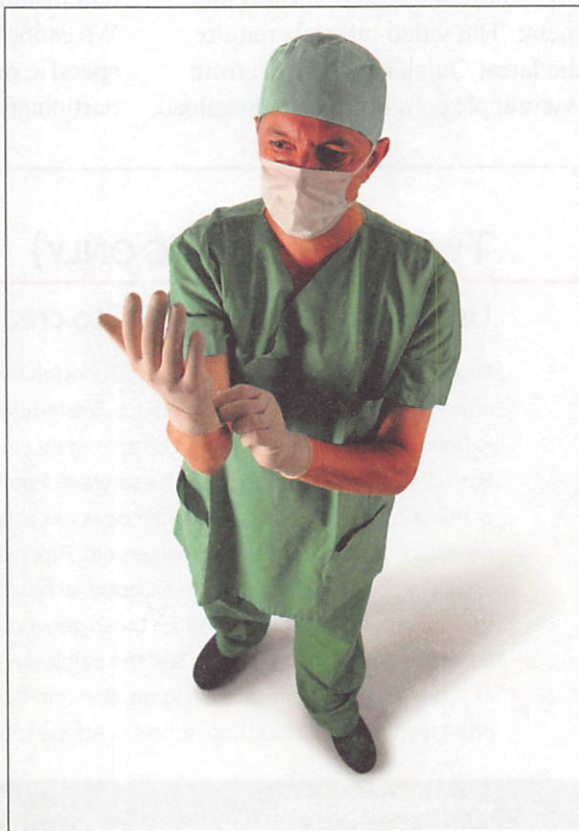
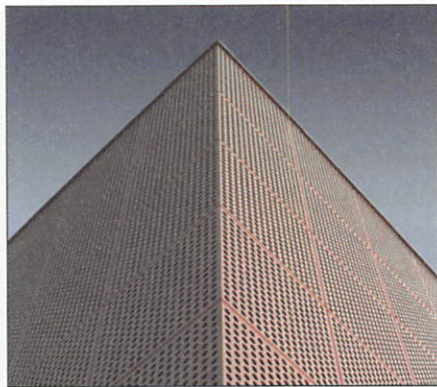


Cybia Brushes

From the disc interface, click on the drop-down menu and select Photoshop Brushes from the Resource selection. Copy the brushes supplied with the CD to your choice of folder on your computer. Run Photoshop and view the 'Brushes Palette'. Choose Load from the palette options and navigate to your brushes folder. Select the brushes supplied with the CD and click OK. You will now see the set of brushes appear in your brushes palette window.

Add a professional touch to your Photoshop work with this selection of superb images

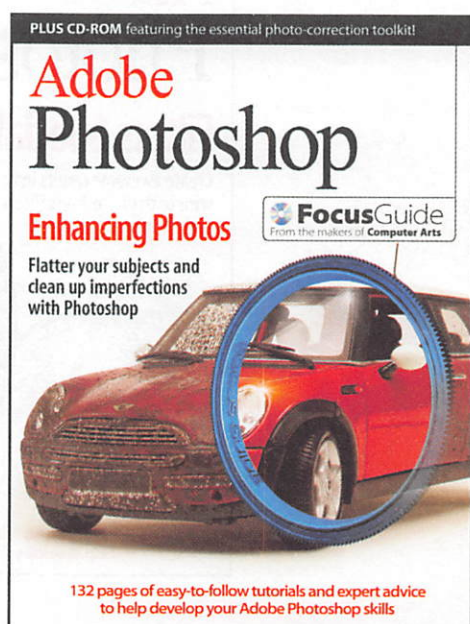
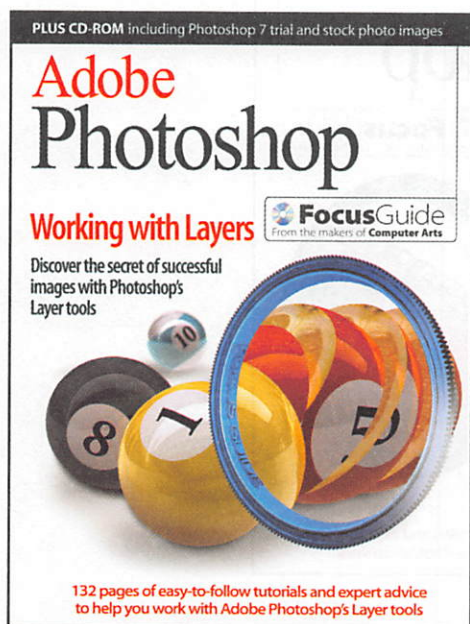
Swiss company AbsolutVision is home to photographers, graphic designers and professional lithographers. The first JPEG2000 photo library was created to enable customers to download inexpensive, professional-quality, royalty-free photos. On the CD you'll find a selection of sample images worth over £1000. For more information visit www.absolutevision.com



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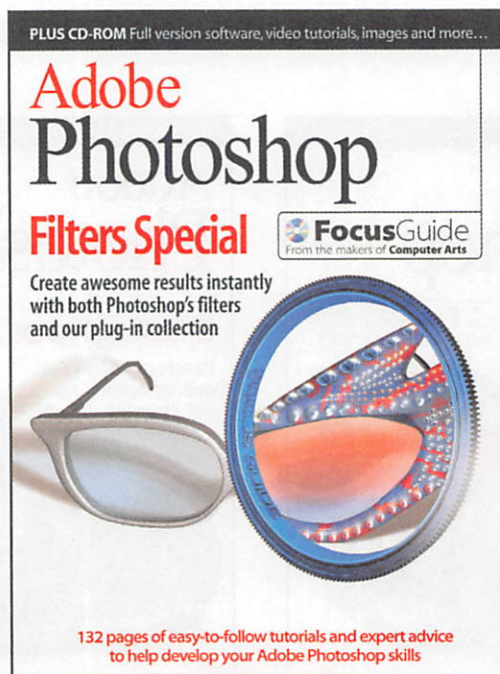
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All contents subject to change



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Glossary

We always try to cut out the jargon, but it helps to add a few words of Photoshop-speak to your vocabulary...

Anti-aliasing

Moving pixels around can cause undesirable jagged edges to appear, where edited pixels have not blended smoothly together. Anti-aliasing refers to the process of smoothing out these jagged edges for a more natural look.

Blending modes

Blending modes are used to determine how the pixels in a layer are blended with underlying pixels on other layers. By applying specific blending modes to individual layers, you can create a wide variety of effects.

Brushes

Brushes enable you to paint on Photoshop images with colour, other bits of images and predefined patterns. They mimic real brushes in that you can alter their size, hardness and texture in order to achieve the effect you want.

Calibration

The process of adjusting a device to bring its behaviour into line with a known specification, helping to reproduce colours accurately. For example, colour monitors are calibrated to a specific colour temperature, gamma, and black-and-white luminance.

Colour channels

There are three or more colour channels in all full-colour images, depending on which colour mode you're using. For example, RGB mode contains red, green and blue channels, while CMYK mode contains cyan, magenta, yellow and black channels. Photoshop enables you to alter each channel independently.

Filters

A filter is a preset tool within Photoshop, which applies an effect to an image (or a selection within the image). Some filters apply their effect in one click, while others offer more complex settings. Filter categories include Sharpen, Blur, Artistic and Stylize. Each of these offer further options via fly-out menus. For a complete list, click in the Filter menu.

Gamut

The range of colour that a device (such as a printer) can produce, or the range of colour that a colour model can represent. If a colour is said to be 'out of gamut', it will not be reproduced accurately by the printing process or other intended destination.

.GIF (or .gif)

A type of image file format best suited to producing simple images for the web. Examples include logos, banners, buttons and anything made up of only a few flat colours.

Greyscale

An image is greyscale if it contains no colour information. Using Photoshop, you can transform a colour image into black-and-white, with many gradations of grey, in a single channel. This is known as a greyscale image.

.JPG (or .jpeg)

A type of image file format that gives a desirable combination of small file size and good-quality photo reproduction. It's commonly used in digital cameras to store the images that you take. The small file sizes also make it ideal for the web.

Layers

Layers containing effects or elements of images can be stacked on top of the original image layer (the background) in order to change the appearance of the image. Layers do not directly affect the layers beneath them, just as a blurry piece of glass placed over a photograph does not actually affect the photograph; in both cases, it's the appearance that has been changed, with the original image left unaltered.

Marquee

The flashing dotted outline that surrounds a selection. You'll also see it referred to in some places as 'marching ants'.

Rasterize

When you 'rasterize' a graphical element, you convert it from a vector to a pixel-based image. It will no longer be scalable like a vector, but can still be edited, like other images in Photoshop.

Resolution

A measure of how many pixels make up an image. A resolution of 300dpi (dots per inch) is recognised as the minimum if you're intending to print your images. 72dpi is sufficient for images intended for the web.

Selection

Any part of an image which you select with Photoshop's tools, usually indicated by a marquee around it. Making selections enables you to work on parts of an image, or remove them, without affecting the rest of the image.

Thumbnail

A small, 'thumbnail-sized' version of an image. You'll find

them in folders of images and in Photoshop's File Browser. Because they're smaller than a full-size image they're fast to load, and you can browse through them more quickly, which makes finding the file you're after much easier.

Pixel

An abbreviation for 'picture element', it's essentially a tiny dot of colour on screen. Most images are made up of millions of pixels, which combine to make an image look seamless. Zoom-in very close to an image, however, or enlarge it to a high degree, and you can clearly see these individual pixels.

PSD

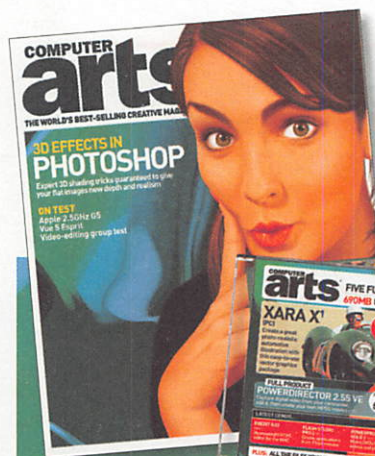
Photoshop's own file format, which preserves elements such as layers and channels. If you're editing an image file, it's sensible to save it as a PSD, in order for the changes you've made to remain editable when you next open it.

Spot colour

A method of specifying and printing colours in which each colour is printed with its own separate ink. In contrast, process colour printing uses four inks (cyan, magenta, yellow and black) to produce all other colours.

Tool options bar

When a tool is selected, the corresponding tool options bar automatically appears along the top of the Photoshop window, giving you access to various options relating specifically to that tool. These often include effects such as Anti-aliasing and Feathering.



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